# New Mexico Mining Minerals Division Mine Registration Program Uranium Mill Registration Files

MMD AUM No	Mine Reg No	Mill Name	Operator	Mining Status	special handling
NA	48	Ambrosia Lake Mill	Mine Registration Program	Permanent Closure, Active Reclamation	
NA	552	Bluewater Mill	Mine Registration Program	Permanent Closure, Reclaimed	
NA	321	Homestake Mill	Mine Registration Program	Permanent Closure, Active Reclamation	

# New Mexico Mining Minerals Division Mine Registration Program Uranium Mine Registration Files

MMD AUM No	Mine Reg No	Mine Name	Operator	Mining Status	special handling
NA	473	Lee Mine	Quivira Mining Company	Never Mined	
NA	413	Marquez Mine	Marquez Development Corp.	Never Mined	large mine map
NM0066	455	Mt. Taylor Mine	Rio Grande Resources	Temporary Suspension	large mine map
NM0048	54	Section 10 Mine	Southwest Resources, Inc.	Permanent Closure, No Reclamation	
NM0053	1035	Section 12 Mine	Southwest Resources, Inc.	Permanent Closure, Active Reclamation	
NM0046	771	Section 14 Mine	Southwest Resources, Inc.	Permanent Closure, Active Reclamation	
NM0021	628	Section 17 Mine	Rio Algom Mining	Permanent Closure, Active Reclamation	
NM0036	629	Section 19 Mine	Rio Algom Mining	Permanent Closure, Reclaimed and Released	
NM0013	630	Section 22 Mine	Rio Algom Mining	Permanent Closure, Active Reclamation	
NM0015	631	Section 23 Mine	Homestake Mining	Permanent Closure, Reclaimed and Released	large mine map
NM0016	632	Section 24 Mine	Rio Algom Mining	Permanent Closure, Active Reclamation	
NM0018	633	Section 25 Mine	Homestake Mining	Permanent Closure, Reclaimed and Released	large mine map
NM0012	634	Section 30 Mine	Rio Algom Mining	Permanent Closure, Active Reclamation	
NM0035	635	Section 30 West Mine	Rio Algom Mining	Permanent Closure, Reclaimed and Released	
NM0031	1036	Section 32 Mine	Homestake Mining	Permanent Closure, Reclaimed and Released	
NM0022	636	Section 33 Mine	Rio Algom Mining	Permanent Closure, Active Reclamation	
NM0019	637	Section 35 Mine	Rio Algom Mining	Permanent Closure, Active Reclamation	
NM0017	638	Section 36 Mine	Rio Algom Mining	Permanent Closure, Reclaimed and Released	

Ambrosia Lake Mill Rio Algom Mining (Quivira, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake

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# Grants looks to reclaim title of "Uranium Capital of the World"

By Erik Siemers (Contact) Monday, November 12, 2007



Photo by Michael J. GallegosTribune

#### Tribune

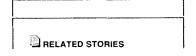
A stone marker sits at the foot of a closed uranium mine 25 miles north of Grants. The pile of clay rock seen in the background covers nearly 7 million dry tons of tailings, the byproducts of the mining operation.



Photo by Michael J. GallegosTribune

#### Tribune

An old wooden wagon sits in the empty parking lot of the abandoned Monte Carlo Restaurant on Santa Fe Avenue, the main road through Grants. The building is one of the oldest in the city and stands across the street from the new post office building in downtown Grants.



It might have been the tombstone for an industry.

The neatly inscribed chunk of rock 25 miles north of Grants marks the final resting place of about 7 million dry tons of tailings - the finely crushed radioactive leftovers of extracting uranium from rock - from the mill site at Ambrosia Lake.

It's meant as a warning sign of the 1,850 curies of radon located within the massive pile.

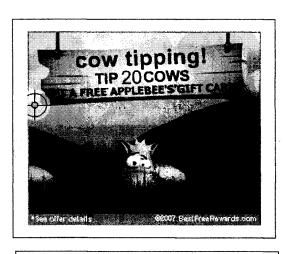
But it's also a symbol of what's left of a town that once was - a tombstone for the "Uranium Capital of the World."

Grants, as the locals are proud to say, isn't dead. But its role as the uranium capital, as headquarters of a district that mined more uranium than any other in the United States, fell just as the price of the commodity plummeted in the early 1980s.

"We're talking about bringing them back."

Rick Van Horn says this on a drive through the old Ambrosia Lake mining site north of Grants. It's his company, Uranium Resources Inc. of Lewisville, Texas, that has renewed hope among many that Grants could soon reclaim its old title.

URI last month agreed to buy Rio Algom Mining LLC and a mill license from BHP Billiton Ltd. for about \$126.5



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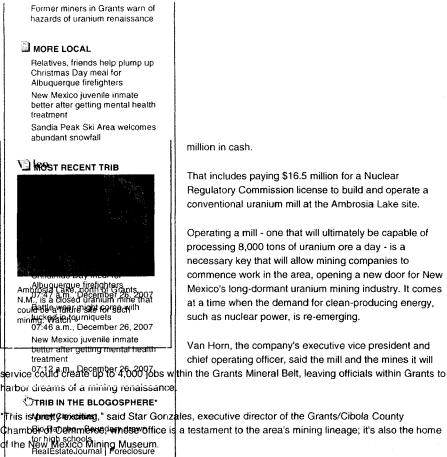
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Activity May Have Peaked

We downern this days a huga reconomic boost." everybody | Real estate

Grants, a town named after the three blothers commissioned to build a railroad there, from the late BDONNAWrits Aconomys shift around livestock, logging and even carrots.

and is not responsible for the

It washes in the study of stud plecever procedure and the process of the control o yello*ฟ୍ଟ୍ରିଟ୍ଟେୟର୍କ୍ସଟ୍ଟିଫ୍ମଫ୍ରିଟ୍*ଫେମ୍ଫ୍ରନ୍ଫ୍ରେନ୍ଫ୍ରେନ୍ଟ୍ର୍ର୍ବ୍ବର uranium, and Martinez's discovery couldn't have come at a better time.

The federal story Commission and was seeking new scurces of nuclear energy for weapons production, said Jon Incall, & Santa Fedattorney for the Uranium Producers of America.

Martified 95 1550 STO Spained a flood of mining interest in the region. At least five uranium mills dmet dat met date of the description of the dreat provided at the New Mexico Mining Museum.

The AEC became the primary buyer of uranium ore.

"The industry was really as much a child of the government," Indall said. "They entered into these contracts, and they set up ore-buying stations. They did everything they could, the AEC, to create this industry from private companies."

Uranium sparked unprecedented growth in the Grants Valley. In 1950, the year of Martinez's discovery, the town had a population of around 2,200. That would reach 7,000 by 1955 and 10,000 by 1960, according to the local history.

Grants officially was a boomtown.

"I saw the money they were making," state Sen. David Ulibarri, a Grants Democrat, recalling when he took a mining job with Homestake after his high school graduation in 1967. "One thing I can remember is they were good jobs, and people were happy."

By 1968, the federal government decided it had gathered enough uranium ore, Indall said. "They went back to the (mining) companies and stretched out those deliveries to keep the industry alive until 1970, when the utilities were to start buying it," Indall said.

That led to a temporary lull, but the industry sparked again in the mid-'70s as the nation began to focus on nuclear power as an emerging fuel source. Private utilities soon replaced the federal government as the primary buyer of uranium ore, bringing the industry to a new peak.

By 1978, New Mexico saw a record yearly production of 9,371 tons of uranium that was shipped to mills and buying stations, according to a report from the state Bureau of Geology and Mineral Resources at New Mexico Tech in Socorro.

Grants was surging. By 1980, the city's population swelled to 11,439. The local high school athletic teams - the Grants Pirates - were large enough to compete in the state's highest division against the big Albuquerque schools.

The local newspaper, the Grants Daily Beacon, featured an atomic symbol by its name above the words in the uranium capital.

The streets of Grants and nearby Milan were filled with a melting pot of personalities and shiny new pickups, some locals say.

"Grants was a pretty fast-moving town. It was one of the most interesting towns anywhere," said Bill Stevens, 79, who managed the Ambrosia Lake site for Kerr-McGee Corp. through 1979.

On the first Wednesday of each month, about a dozen men who once managed the mines and mills of the Grants area convene over barbecue sandwiches in Albuquerque.

They call themselves the Dinosaurs Club and sit in a dimly lit room, around a large wooden table, talking about stock prices, industry news and, often, the old days.

Milan, one says, was once called "trailerville" for all of the portable housing that existed there for the mining families.

And they were paid well.

Workers in the uranium industry then could earn from \$22,000 a year to \$75,000 for the most accomplished miners, said Jack Burgess, 70, who managed several mines during that era and now works as an independent consultant for the mining industry.

"Money was flowing," said Tim Hurley, a mine safety consultant from Albuquerque who managed mines for Kerr-McGee and Ranchers Exploration & Development Co. "They had their pickups, their boats, hunting rifles. You know, toys."

The boom also spawned a sense of local entrepreneurship in some.

"I have a brother, and he saw these trailers coming in, and they didn't have washing machines and dryers and all these things," said Abe Pea, 81, a local historian who has written several books on the history of the region. "He set up all these coin-operated laundries."

But a confluence of circumstances was to emerge that would bring an end to the industry in the region.

The 1979 accident at Three Mile Island nuclear power plant in Middletown, Pa., caused no deaths, but nonetheless bolstered a perception that nuclear power plants were dangerous.

Overproduction in the Õ70s and Õ80s led to large stockpiles of uranium, and the dismantling of U.S. and Russian nuclear weapons reserves added to that, according to the state Bureau of Geology and Mineral Resources report.

Ultimately, it was the diminished market price for uranium that caused the mines and mills of Grants to shut down.

In 1974, the market price for uranium was around \$8 per pound. It shot up to around \$40 a pound by 1978. But as the market dwindled, the price fell to around \$20 a pound in 1982 and even lower into the Õ90s.

By 1989, all conventional underground and open-pit mines in New Mexico closed, according to the state Bureau of Geology and Mineral Resources report.

"When it crashed, it was devastating," said Gonzales of the Chamber of Commerce.

Peoa, the historian, said the local unemployment rate shot up to over 30 percent.

"A lot of foreclosures. A lot of anxiety among people. The miners that came from elsewhere in their trailers by and large left," Peoa said. "You could see hundreds of homes on the market for sale."

Today, with about 9,000 residents, Grants has diversified its economy, in large part thanks to employment opportunities from two state prisons, Gonzales said. A billboard along the side of the road where vehicles exit Interstate 40 shows a corrections officer welcoming visitors to the area.

But a need remains.

"The job need is great for higher paying jobs. And the (corrections officer) job seems to be very tough, either for background restrictions or just the nature of the beast," Gonzales said. "There's a need for more."

Now, Grants finds itself back in a familiar position, eager to usher in another wave of uranium mining on the verge of a new nuclear age.

The re-emergence comes as that stockpile of uranium has been whittled down, the cost of natural gas increases and the world becomes more aware of environmental drawbacks of generating electricity, said David McIntyre, spokesman for the Nuclear Regulatory Commission.

The NRC has recently received two applications for new reactors - one in south Texas, another in northern Alabama. They are the first applications for new reactors in 30 years, McIntyre said.

"We're expecting a number of new applications for up to 32 reactors over the next two or three years," he said.

With that demand comes a surge in price. The weekly spot price for uranium has ranged from \$70 to \$140 a pound this year, and it hit \$90 a pound last week, according to data from Ux Consulting Co., a Roswell, Ga., uranium consulting and market analysis firm.

And the ground remains fertile with uranium, local industry experts say.

About 350 million pounds of uranium have been extracted from the Grants Mineral Belt, Van Horn said. He and Indall both cite estimates of up to 600 million pounds that remain unmined.

Indall said about eight "fairly substantial" companies and another four or five smaller firms have been staking claims in the Grants area since about 2003.

Many of the old-time miners question whether that much uranium ore exists. Stevens said he looks at such statistics with some skepticism.

"Most people think uranium is a rare element. It's all over," Stevens said. "But only in rare circumstances is it concentrated where you can extract it and make a profit."

But URI hopes to do just that.

The company's purchase of the Ambrosia Lake site is expected to close by June 1. Van Horn said it will take 18 months to two years to construct a mill on the footprint of the former Kerr-McGee mill at the site.

At the early stages, the company will be able to process 3,000 tons of uranium a day with plans to grow to 8,000 tons a day once the industry gets back into full gear.

While the re-emergence of uranium brings with it the hope of a vibrant economy, some people in Grants are equally cautious about relying too much on an industry that could vacate with a dip in the markets.

"A lot of people have some founded fears of them coming and leaving, not taking care of the community in which they live," said Gonzales. "We've had extensive conversations with these companies and let them know we expect some infrastructure and community support. . . . In another generation or so, it could be played out again."

But Indall says the uranium industry will stick around for a while.

"We're not going to be producing 40 million pounds a year in New Mexico anytime soon. But we are going to be producing, let's say, 10 or 15 million pounds eventually, once they get the mill going," Indall said. "If you do the math, that's probably 30 to 40 years that this should continue."

As a man who knows about history, Peaa knows that means another boom for Grants.

"Money does crazy things," he said. "It's hard to predict."

#### TRIB TALK: WHAT ARE YOUR COMMENTS ON THIS STORY?

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Posted by rvc789 on December 17, 2007 at 10:29 p.m. (Suggest removal)

The mines will bring much needed work to the area but what coverage has there been on the people living in San Mateo and other surrounding areas that the mines will directly effect. Grants will get the economy boost but what price might the residents of the towns the mines will be in have to pay?



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400

FAX No.: (505) 476-3402

# FORM 10: ANNUAL REPORT

**URANIUM MILLING OPERATIONS** 

10 Old Stope Leaching/Ambrosia Lake Mill Quivira Mining Co.

An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

Name o	of Comp	pany: Rio A	lgom Mining LLC	3 87020				
								0000776
			ke Mill		0.1			2900776
Locatio	n: Coun	<sub>ty</sub> McKinley	1/4-1/4 SecA1	1 Section	on_31	Township	.4N	Range 9W
Directio	ons to Lo	ocation if Unsurveye	ed:					
Manage	r or Per	son in Charge and T	itle (please print):	Mr Teri	ry Fletcher	General N	fanager	
-		-			•			287-8851
Address		1958				nephone. (	)	3031
Start Up	Date:_	1930						
1.	Was t	here a change in m	ill name, owner or op	erating comp	any during the repo	rting year?		
	XX Y	res N	n If yes give	e date of char	nge:2/12 / 0	2		
	2121		J 11 903, g1	o dute of chai	(month / day / yea			
	Natur	e of Change:	Became a limite	ed liabil:	ity corporation	on		
2.	If a su	ibsidiary of a large	company, provide th	e following i	nformation:			
	NTomo	of Doront Common	Rio Algon	Mining I	LLC			
	Addre	6305 Wat	y: Rio Algom erford Blvb, St	e. 325,	Oklahoma City	- OV 7	110	
	riduic	/33			•	y, UK 7.	0110	······································
	Telep	none.( )_800=	931-1190					
3.	Туре	of Operation:	XX Conventional		Insitu Leach	h		
						3800		
	a.		ed Production Capacity	y:	Gallons/minute			
	•	Average Utilized			Gallons/minute	700	_	
	b.		ill Rated Capacity:		Tons/day	<del>7000</del>	_	
		Average Utilized	- •		Tons/day			
	c.	Do you custom r			Yes	XX] No		
		If yes, what quar	ntity (Lbs.) of total reco	overy was cus	tom milled?		<del>_</del>	
4.	Mill Er	nployment Informat	ion:		_			
	a.	Total Average n	number of <b>direct</b> empl	loyees:18	3 (total numbe	er at mill; do n	ot include	employees at mine)
	b.		days of operation:					365
	c.	Total yearly pay	roll:					\$ 866 000
	d.	Average number	of contract employees	s, haulers, etc	. (do not include in t	otal direct):		5

5.	Description and Value of Improvements Made During Year  a. Power Plant:	¢	<i>s</i>
	b. New Structure(s):	\$	
		\$	
	c. Existing Structure(s):	\$	
	d. Equipment:	\$	
	e. Other (specify):	\$	
	TOTAL	* \$	0
4	Production Decovery and Value During voes	•	
8.	Voluntary Information: Voluntary responses to the following questions would be helpful to the additional information would be appreciated.	he Departi	ment. Any othe
	Delivery contracts:		
	a. <u>Domestic Utilities</u>		
	N/A		
	b. <u>Foreign Utilities</u>		
			<del></del>
I here	by swear or affirm that the information herein provided is true, complete and correct.		
	Terry & Fletchen Date: 4/25/03		
Signa	(PLEASE COMPLETE ALL OF THE FOLLOWING LEGIBLY)		
	Terry Flecther		
	(please print) General Manager		
Title:	PO Box 218		
Addre	ess:		
- J	<u> </u>		
~	E-mail: tfletcher@ramc.net		



STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department



Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

# MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Smel	ter: <u>Ambrosia Lake M</u>	<u>i11</u>
Name of Company: Ot	iivira Mining Company	Telephone: (505) 287-8851
Address: Box 218.	Grants, NM 87020	
Manager or Person in Ch	narge and Title (please print):A	rthur E. Gebeau, General Manager
	any (if applicable):	
Location: County McKir	<u>nley 1/4-1/4 all Se</u>	c. 31 Township 14N Range 9W
Directions to Location if	Unsurveyed:	
	Vame:	
MSHA Number: 29	900776	Start Up Date: 1958
	Surface Adit He	or this operation:,, ap Leach In Situ Leach Other (describe)
	Processed: <u>Uranium</u>	
		Inactive Under Development
		rear) 6000TPD at peak
Mineral Estate Owner:	Name: Quivira Mining	Company
	Address: Box 218, Grant	s, NM 87020
	Telephone: (505) 287-8851	
Surface Estate Owner:	Name: (same)	
	Address:(same)	
	Telephone:( )(same)	
Mineral Estate Classifica  State Indian	_ Federal	
I hereby swear or affirm	that the information	. (
herein provided is true,	complete and correct,	
and that all information or released.	on this form may be	Title: General Manager
1 -11	H I	
- H. M. 9	Address: <u>(as above)</u>	
Signature E Coh	0.011	
Arthur E. Geb Name (please print)	eau	Date: February 10, 1993

# State of New Mexico ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT Santa Fe. New Mexico 87505



GARREY CARRUTHERS
GOVERNOR

April 6, 1990

ANITA LOCKWOOD CABINET SECRETARY ROBERT M. EVETTS DEPUTY SECRETARY

#### **MEMORANDUM**

TO:

Tim Leftwich, Director

FROM:

Bill Hatchell, Chief MIS

SUBJECT:

Ambrosia Lake Tailings Reclamation (Quivira)

Quivira Mining (now Rio Algom, formerly Kerr McGee) is in the process of uranium tailings reclamation and management on a 325-acre, 36 million-ton pile at its Ambrosia Lake facility. The pile falls under Title 2 as NRC-regulated, utility-generated tailings. The Phillips pile, just 1 mile northeast of Quivira, is under Title 1, UMTRA (DOE) as defense-generated tailings.

The Quivira project is budgeted under 2 stages: Stage 1 (\$43 million) is underway, and will be highlighted below. Stage 2 will involve the eventual dismantling of the mill itself and burial within the tailings pile and final rock (rip-rap) capping over a 6-inch to 1-ft. borrow-material mantle.

This type of operator-managed reclamation project should eventually get Congressional budgeting with a 3-way cost split involving utility companies, the uranium producers and the Federal Government. This is included in the various uranium revitalization bills circulating through Congress, none of which have yet been passed.

Following are bulleted highlights of the Quivira project:

- 325-acre pile to be broadened to about 400 to 450 acres with original slopes of 1:2 made to 1:5 and total height at least doubled.
- Ponds drained and slimes removed to core of pile
- Windblown tailings surrounding pile already recovered and placed in pile under a 6-inch borrow dirt cap.

VILLAGRA BUILDING - 408 Galisteo

2040 South Pacheco

LAND OFFICE BUILDING - 310 Old Santa Fe Trail

Forestry and Resources Conservation Division P.O. Box 1948 827-5830 Office of the Secretary 827-5950 Oil Conservation Division P.O. Box 2088 827-5800

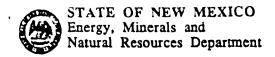
Park and Recreation Division P.O. Box 1147 827-7465 Administrative Services 827-5925

Energy Conservation & Management 827-5900

> Mining and Minerals 827-5970

- Entire pile surrounded by a sump ditch up to 60-ft. deep dug into the underlying Mancos Shale bed rock.
- Outer periphery beyond the ditch set with groundwater monitoring wells under jurisdiction of EID with NRC concurrence.
- Water drained from old ponds now in a new lined pond meeting EID/NRC specs.
- Any new material that might be added from start up of production will be placed on top of old pile.
- Background levels being achieved at 20 or less pico-curies. (Santa Fe City background ranges from 12 to 22).
- Terry Fletcher is the reclamation project manager at Quivira; Hal Whitacre is the General Manager; Art Gebeau is the Production Manager.
- Quivira continues to produce yellowcake from mine water (IX) recovery at the rate of 200,000 lbs. per year.

Tim, another visit can be rescheduled whenever you want. We have an open invitation from Quivira.



Date: 10-10-89

## MINE/MILL/SMELTER REGISTRATION

Name of Mixe/Mill &	Somether:Ambrosia_La	ake Mill
Name of Operator:	Ouivira Mining Compa	Telephone: 287-8851
Address: P.	O. Box 218, Grants, No	ew Mexico 87020
Name of Previous O	perator (if applicable):	
Location: County	McKinley	1/4-1/4 All Sec. 31 Township 14N Range 9W
Directions to Locatio	n if Unsurveyed:	
USGS Quadrangle M	ap Name: Ambrosia	Lake 19170
	2900776	/ npr 1989
Type of Operation:	(please check)	e Beceived
	Surface         Adit           Shaft         In S           MillX         Sme	itu Leach
Mineral or Commodi	ty Produced: Uranium	
Mineral Estate Owne	Address P.0	k of Commerce Box 17089, Ft. Worth, Texas 76102
Surface Estate Owner	AddressP.0	vira Mining Company . Box 218, Grants, New Mexico 87020 287-8851
Mineral Estate Class	ification: (Please check)	
State	Federal Indi	an Private X
I hereby swear or herein provided is tr	affirm that the informative, complete and correct.	Registration Number Assigned
Address: P.O. Box	Manager (218 NM 87020	By:Signature  Title:Date:

Bluewater Mill Arco Coal Company (previously Anaconda) USGS Quad: Bluewater

u sued

J. + 1

Mining & Minerals Division 2040 South Pacheco St. Santa Fe, NM 87505

DO NOT	WRITE	THIS	SPACE

6BL 10-

REPORT OF SAFEGUARDING

Name of Operator:	ARCO Coal Compa	any				
Address:	P. O. Box 638,	Grants, Nev	v Mexico 87	020		
Mine Name:	Bluewater Mill			MSHA Nu	mber <u>Canc</u> 12N	elled
Location: County	Cibola	1/4-1/4	N <sup>1</sup> <sub>2</sub> Sec.	24 13 <b>Towns</b>		11W Mill Range 11W Tail
Directions to Location	on if Unsurveyed:_	Eight miles	northwest	of Grants, No	ew Mexico	-
Type of Operation (p Surface Mine Shaft			Other Mineral N	X C	Losed Urani Being D	um Mill ecommissioned
DESCRIPTION OF (include quantities of		ND PROCED	URES USED	IN COMPLE	TED SAFE	GUARDING:
Property perime	ter is fenced wi	ith signs pro	scribed by	the United St	tates Nucle	ar
	ission. Twenty-					
						····
DATE OF COMPLI	ETION:					
	<del> </del>	·			).	k.
I hereby swear or at	firm that the infor	mation herein	provided is tr	ue, complete an	, a .	
1/5/	>>				7:	
Nomen	<del></del>	. Ziegler				en e
Signati	1					₹25 <b>m</b> .
Title: Project Man	agér, Bluewater	Mill				
Address: P. O. Bo Grants,	x 638 New Mexico 8702	20				
Date: 1-8-90	<u> </u>					

ARÇO Coal Company Bluewater Mill Post Office Box 638 Grants, New Mexico 87020 Telephone (505) 876-2211



February 8, 1990

Tim J. Leftwich Mining and Minerals Division 2040 South Pacheco St. Santa Fe, New Mexico 87505

Dear Tim:

Attached are the following completed forms per your request of January 10, 1990.

Form 1 Registration Form 10 Annual Report

Form 13 Report on Safeguarding

For your information, the Bluewater Uranium Mill is currently being decommissioned (demolished) under an approved United States Nuclear Regulatory Commission Plan. The Mill is permanently closed and will not reopen.

Please call if you have any questions.

Sincerely,

R. S. Ziegler Project Manager

jmn

Attachment

FED ON MINE OF SECTION OF SECTION

## MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill Smelter	Bluewater Mill			
Name of Operator:	ARCO Coal Company		_Telephone:(50	5) 876-2211
Address:	P. O. Box 638, Grant	ts, New Mexico	87020	
Location: County Cib	(if applicable):	Sec13	Township 12N	-
	ne: Grants 2SW QUAD 7.5			
	ed			
		Other	(describe)	
Mill	X Smelter	He	eap Leach	
Mineral or Commodity Proc	iuced: Closed Uranium Mi	l1/Being decommi	ssioned under	approved NRC Pla
Mineral Estate Owner: Surface Estate Owner:	Name         ARCO Coal Company           Address         P. O. Box 638,           Telephone         (505) 8           Name         ARCO Coal Company           Address         P. O. Box 638           Telephone         (505) 8	Grants, New Mex 76-2211 y Grants, New Mexi	.co 87020	
Mineral Estate Classification	•			(BBI)
	ıl Indian	Private	X 6	CCLIVED AMERICANS ACTURE MINISTER AS
I hereby swear or affirm herein provided is true, con Signature  Title: Project Manager, Address: P. O. Box 638  Grants, New Me	R. S. Ziegler  Bluewater Mill	DO NOT W Registration Nu By:  Title: Date:	Signature	
Date: V-8-90				

Homestake Grants Mill Homestake Mining Co. USGS Quad: Grants



### Homestake's mission in Cibola County

CIBOLA COUNTY - Project Manger Alan Cox of Homestake Mining Company wants people to know what the company is doing here.

"We stayed very, very quiet," he said of the site at NM 605, five miles outside of Milan. "Our focus at this site ... we're trying to do our ground water remediation," Cox said, adding that it has taken years and will continue for several more to clean the ground water and tailing piles. He said it is hard to explain to people exactly what the employees do at the remediation site, but they do maintain it and the clean up is going well. Contaminants recently found outside the pond area that are higher than the Environmental Protection Agency and New Mexico Environmental Department standards for water are being addressed.

There are two methods of water cleaning methods at the facility that work together: reverse osmosis and evaporation.

The reverse osmosis (RO) method has been operating at the site for six years. A 300,000-gallon water system was installed around 1999, and in 2002 Homestake doubled the capacity to 600,000 gallons, Cox said.

"Reverse osmosis is a filtering system," he explained. "It's a very fine filter system." He noted the process pulls out metals and contaminants. The clean water is injected back into the aquifer, he said. The company recently added trenches around the site, as a hydraulic barrier in the aquifer to contain contaminated ground water until it is extracted and collected.

The water is first drawn from the ground and is filtered several times, and the water's pH is increased to "basic" to drop out the calcium and minerals, he explained. Then it is filtered through the RO and put back into the ground. The pH level is adjusted with sulfuric acid during the process to normalize the water's pH level.

The sludge from the water softening system goes into the staging pond and then to evaporation ponds, which are lined, he said.

The evaporation method at the site is what people see from NM 605. They may see two staging ponds and then the small tailing ponds that spray water into the air. It does not operate at night and is offline in the winter to prevent freezing.

Cox explained that only the liquid part of the water evaporates into the air, and then

contaminants settle into the lined pond. It was always a viable method because of the dry air in the southwest, he said.

Toward the end of the project the ponds containing contaminants will be dried, reclaimed and moved to the current spraying pond. The cleaning and RO equipment will be buried with those contaminants at that location, he explained, then Homestake will cover it with a radon barrier and put rock on top of it.

"That's the conventional closure of the tailings ponds," Cox said, adding that was how it was done at Ambrosia Lake and the former Kerr-McGee sites.

Cox maintained it could take another 10 years to complete the project, but that can change. If the company meets the requirements set by the Nuclear Regulatory Agency, and there is a more cost-effective and faster method, then the company will probably use it

"They are continuing to evaluate site cleanup and reclamation, and looking at various options," he said.

When they were extracting uranium from ore and producing yellow cake many years ago, the waste material from that was finely grounded and put in a pile. That is referred to as the "tailing piles," he said.

Cox explained that the areas that are not lined are the original milling tailing piles; however, a pond on top of the large tailing pile is lined, and Homestake continues to extract the contaminants from the tailings piles.

The large pile holds 20 million tons of tailings and the smaller one holds two million.

He said excessive amounts of rain affects cleanup. In one way it is good, because new water is added to the ground water, but when it rains the evaporation ponds need to be put on standby and that slows cleanup.

Homestake's property covers 14,000 acres in Cibola County. The company leases 12,000 acres to local ranchers for grazing and 100 acres has alfalfa. Homestake regularly samples the soil and cuttings.

He said a percentage of the cost for cleanup is paid for by Homestake and a percentage is paid for by the federal government through the Superfund. A superfund site is made when no one has liability for what was mined, he explained. Cox does not know what the percentages are, but they are based on the length of time the government owned and operated the mines using contracted companies and when the mines were privatized and sold for operation.

In regard to recent mining exploration in Cibola County, Cox said that Homestake will not be exploring, but it could receive royalties by selling its mining licenses. He also commented that current mining methods, like the leaching method, differs from 30 to 50 years ago and does not require laborers to bring ore out of the ground.

By Hene Haluska

#### Homestake's mission in Cibola County

CIBOLA COUNTY - Project Manger Alan Cox of Homestake Mining Company wants people to know what the company is doing here.

#### **CCSO** receives Mobile Command Vehicle

GRANTS - The Cibola County Sheriff's Department has a new Mobile Command Vehicle.

#### A look at Animal Control

GRANTS - One of three animal control officers resigned from the Grants/Cibola County Animal Control department last month.

#### Spay/neuter discounts available in October

MILAN-Pet owners can take advantage of a twice-yearly discount spay/neuter offer throughout October in Grants and Milan.

#### Business loses \$8,000 of equipment in burglary

GRANTS - Advanced Mechanical on E. Santa Fe Avenue announced it lost \$8,000 in equipment during a burglary last weekend.

#### MainStreet elects new board members

GRANTS-Long without a full board of directors, Grants Mainstreet Project elected four new board members in a general meeting last week.

#### Health Council hears about possible flu pandemic

GRANTS - Margot White of the University of New Mexico Medical School gave a presentation on the characteristics and challenges of a possible pandemic flu outbreak to the Comprehensive Community Health Council Thursday at the Future Foundations Family Center in Grants.

#### Local artists are active this fall

GRANTS - The artistically creative folks in our community have been busy winning prizes and planning shows as summer turns to fall.

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

## SAFEGUARDING INSPECTION CHECKLIST

Mine/Company: Homestake /X Plant / Homestak Company phone: 287-445h	L -
Company phone: 287-445b	MIN'
Date of inspection: 5/27/93	Charles The Control of the Control o
Name of inspector: KS H	9) 0
Others present: and before	
Location of mine (legal description or directions to site):	
Check all the following that apply:	
Shaft: Adit: Pit: Quarry: Mill: Highwal	ll(s):
Pond: Other: (Describe):	· · · · · · · · · · · · · · · · · · ·
Shaft: Adit: Pit: Quarry: Mill: Highwal Pond: Other: (Describe):  Commodities produced:	
Safeguarding methods used: (describe all that apply)  Slope of pit walls or tailings:	your a slat field that
Slope of pit walls or tailings:	some cotated of sectamed.
Guardrails, fencing, berms or other at highwalls:	c may ge wat vive am
Fencing around property: (types, locks, etc.)	
Warning signs:	
Backfilling of shafts, adits, and auger boreholes: (how far into op	ening)
	<u>-</u> .
Personnel on site: Guards:	
Temporary closure methods used: (if mine is temporarily suspended	)
Openings sealed with steel reinforced concrete or masonry wall:	
Shafts sealed with steel reinforced concrete slab or cable net closu	ıre:
Wire fence:	
Barbed wire (4 strands):	
Cable closure:	
Heavy rope closure:	
Support posts painted fluorescent color:	
Other:	
Beginning priority classification:	
Ending priority classification (to date): O	
Talland on anti-manadad for anomaton to marforms	
The second secon	
Other comments: May met have heen registered a Signature of inspector: K, Hother Title:	- 11
	posoble
Other comments: man mit have been resistered a	he to closure pur to 86-1.
	check.
Signature of inspector: K, H, H, H	Correct_
Title:	CHECK LIST was mot visted
Agency:	NISO date:
Address:	ROS date:
	Topo:
Review by MMD Director: Date: Initials:	Reports:

tue



STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

Mining and Minerals Div 2040 South Pacheco Stree Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

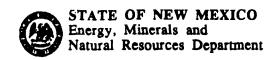
# NOTICE OF INTENTION TO SUSPEND OPERATIONS

DO NOT WRITE IN THIS SPACE

				L		
	Homestake Min	ing Company o	f California			
	PO Box 98, Grants,			0000		· · · · · · · · · · · · · · · · · · ·
	Grants Mill					D1 004
	CountyCibola		L Sec. Zb	Township	ZN_Range_	RLUW
Directions to Locatio	n if Unsurveyed:					
Start Up Date:	1958					
Type of Operation (p	lease check):					
Surface Mine		Mill	<u> </u>			-
Shaft	Insitu	Miner	al Mined or Mill	ed		-
Check One: Perr	manentX	Temporary _		Suspension I	Date	ly 10, 1992
DESCRIPTION OF available upon requ	SAFEGUARDING PRO est from MMD).	CEDURES AND 1	MATERIALS US	SED: (Note: S	Safeguardin	g guidelines a
_		dan dan Dian d			l	D1
Mill Decommissi	loning and Decontar	unation Plan	nas been sub	mitted to t	ne Nuctea	ar Regulato
	c) as per NRC regul					pment will
disposed of by	burial or salvaged	land is sched	nted to pedi:	n mia-1993.		
				RECE	5 100 5 100 8 MINERALS INISION	
				(	. !	
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Signed by:	7-70		Approved/	res)		
	rick R. Craft		· 7			
Name (please print)			Af	2 . At.	$\mathcal{I}_{I}}}}}}}}}}$	, )
	nt Manager ox 98		Ву:	Least The	eansa	m
	ox 98 Fs. NM 87020		7	gnature	$\overline{J}$	
			Title: ////	rector	السيا	
Telephone: ( 505	) <u>787-4456</u> March 2. 1993		Date: Cipa	1661	792	
Date:	161 GL 4 G 1773		1	and the state of		il vordpi se 15 15 iz iz

8	TO PROM		

1 \*\* \* \* \* \*



# MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill	Smelter: Homestake Mining Company	7 - Mill					
	Homestake Mining Company						
Address: Post (	Office Box 98. Grants, New Mexico 870	020					
Name of Previous C	Operator (if applicable):						
Location: County <u>Cibola</u> 1/4-1/4 <u>full</u> Sec. 26 Township <u>12N</u> Range <u>10W</u> Directions to Location if Unsurveyed:							
MSHA Number:	2900775						
Type of Operation:	(please check)						
MINE:	Surface Adit ( Shaft In Situ Leach	Other (describe)					
	Mill X Smelter	Heap Leach					
Mineral or Commod	lity Produced: uranium oxide						
Mineral Estate Own	A 33						
	Telephone						
Surface Estate Owne	er: Name Homestake Mining Cor Address Post Office Box 98, Telephone 287-4456	Grants, NM 87020					
Mineral Estate Class	sification: (Please check)						
		Private Ministral					
I hereby swear or herein provided is the	r affirm that the information of the rue, complete and correct.	NO WRITE IN THIS SPACE					
Signature	Registre	tion Sumber Assigned					
Address: PO Box	dent Manager k 98 s, NM 87020	Signature					
Date: 2-14-90							

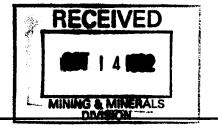




Lee Mine Quivira Mining Co USGS Quad: San Mateo



STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department



Mining and Minerals Division

2040 South Pacheco Street Santa Fe, NM 87505 Telephone: (505) 827-5970

FAX No.: (505) 827-7195

DO NOT WRITE IN THIS SPACE

# NOTICE OF INTENTION TO SUSPEND OPERATIONS

Name of Company: Quivira Mining Company Address: P.O. Box 218. Grants. NM 87020							
Mine or Mill Name: Lee Mine MSHA Number: n/a							
Location: County McKinley 1/4-1/4NW/NFSec. 17 Township 13 Range 8							
Directions to Location if Unsurveyed:							
Type of Operation (please check):  Surface Mine Adit Mill Other  Shaft Insitu Mineral Mined or Milled U <u>raniu</u> m							
Check One: Permanent X Temporary Suspension Date Development halted in 1982.							

DESCRIPTION OF MATERIALS AND SAFEGUARDING PROCEDURES: (Note: Safeguarding guidelines are available upon request from MMD).

The shaft collar was covered with 6" steel beams to support a steel plate which was welded in place. The cable access tunnel from the building basement was blocked with a steel plate welded in place and the building doors were welded shut. The gate on the access road to the minesite is kept locked and is checked by our people or the surface owner on a regular basis.

Signed by:

Arthur E. Gebeau

Name (please print)

Title: General Manager

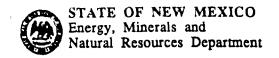
Address: P.O. Box 218

Grants, NM 87020

Telephone: (505) 287-3851, ext 200

Date: 10-13-92

DO NOT WRITE IN THIS SPACE	
Approved Yes	
Me H	
By: Title: Surform	Signature
Date: / Det. /4, 1997	in the state of th
	vis 194 Sauts



# MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mixxx	Somoleer: <u>Lee</u>	Mine		
Name of Operator:_	Quivira Mini	ng Company		Telephone:287-8851
Name of Previous C	Operator (if applic	:able):		
Location: County	y <u>McKinley</u>	1/4-1/4	NE/NW Sec. 17	_ Township 13N Range 8W
Directions to Location				8-1-1-6
USGS Quadrangle N	Map Name:	lmbrosia Lake		OCT 1989
MSHA Number:	2900541			RECEIVED E
Type of Operation:	(please check)			Chu Section 1
MINE:	Surface	Adit In Situ Lea	Other	X(describe) (Shaft in development stage
	Mill	Smelter	1	Heap Leach
Mineral or Commod	ity Produced:	<u>Uranium - no p</u>	production	
Mineral Estate Own	Address_			
Surface Estate Own	Address	6200 Uptown E	nd Company Blvd. NE, Ste 40	0, Albuquerque, NM 87125
Mineral Estate Class	sification: (Pleas	e check)		
State	Federal	Indian	Private	X
I hereby swear of herein provided is t	r affirm that the	d correct.	DO NOT	WRITE IN THIS SPACE
Signature	IMI/(JULIA			lumber Assigned
Address: P.O. Bo	Manager 0x 218 , NM 87020		By:Title:Date:	Signature
Date: 10-10-8	39			

Marquez Mine & Mill
Juan Tafoya Grant (Marquez Dev., Bokum Resources)
USGS Quad: Marquez



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Douglas M. Bland
Director
Mining and Minerals Division

October 13, 2000

Mr. K.E. McKorkle C/O Marquez Development Corporation P. O. Box 13958 Albuquerque, NM 87192

Dear Mr. McKorkle:

This letter responds to your letter of October 4, 2000 enclosing photographs of the safeguarded mine and vent shafts for the Marquez Mine and Mill site located in McKinley County, NM which has been closed pursuant to the NM mine safeguarding requirements (19 NMAC 7.2).

The Mining and Minerals Division of the Energy, Minerals and Natural Resources Department has reviewed the photographs and finds that you have met the State's safeguarding requirements.

If you have any questions or comments I can be reached at 827-1352.

//w

# MARQUEZ DEVELOPMENT CORPORATION

October 4, 2000

Mr. John Pfeil New Mexico Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Dear Mr. Pfeil:

Please be advised that Marquez Development Corporation has completed the permanent closure and safeguarding of the Marquez Mine and Vent Shafts located in McKinley County

All site restoration and safeguarding activities were conducted and completed in accordance with the criteria as specified in the Notice of Intention to Suspend Operations (Form 12-Attachment A) submitted to your office on March 6, 2000. As per your request, photographs of the Safeguarded Mine and Vent shafts are enclosed.

It is our belief that we have satisfactorily met the State of New Mexico's safeguarding requirements (19NMAC 7.2) and that no further action is required.

Should you have any questions or require further information, please contact me.

Thank you for your cooperation.

Sincerely,

K. E. McCorkle

Vice President of Operations

J. E. Mk Corble

# MINE AND VENT SHAFT PHOTOGRAPH IDENTIFICATION

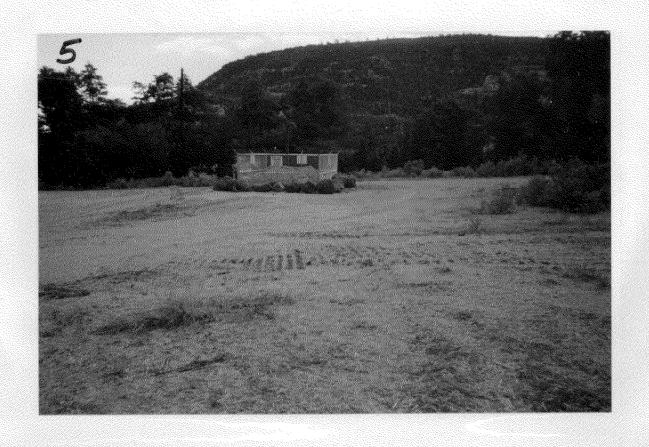
- No.1 <u>Mine Shaft</u>—looking West—Safeguarded Mine Shaft contiguous with head frame support slab and drainage apron. The terrain north and south of the support slab is sloped to ensure that surface water drainage is directed away from the support slab and capped mine shaft.
- No. 2 <u>Mine Shaft</u>— and head frame support slab with drainage apron—looking West.
- No. 3 Mine Shaft—looking East.
- No. 4 Mine Shaft—looking Southwest.
- No. 5 <u>Vent Shaft</u>—looking South—Safeguarded Vent Shaft contiguous with auxiliary hoist support slab. The terrain east and west of the Vent Shaft and hoist support slab is sloped to ensure that surface water drainage is directed away from the support slab and the capped vent shaft.
- No. 6 **Vent Shaft**—looking Southwest.
- No. 7 Vent Shaft—looking East.
- No. 8 **Vent Shaft**—looking North.



















### State of New Mexico Energy, Minerals and Natural Resources Department



GARY E. JOHNSON
GOVERNOR
JENNIFER A. SALISBURY
CABINET SECRETARY

DOUGLAS M. BLAND DIVISION DIRECTOR

March 9, 2000

Mr. K.E. McKorkle C/O Marquez Development Corporation P. O. Box 13958 Albuquerque, NM 87192

Dear Mr. McKorkle:

This letter responds to your letter of March 8, 2000 enclosing a change of registration/change of ownership or operator, and a notice of intent to suspend operations (NISO). Our mine registration database will be updated accordingly. The NISO has three attachments including: A – Permanent Closure and Safeguarding; B – Drainage; and C – Mine and Vent Shaft Cap Design. This submittal relates to the Marquez Mine and Mill site located in McKinley County, NM which is being closed pursuant to the NM mine safeguarding requirements (19 NMAC 7.2).

The Mining and Minerals Division of the Energy, Minerals and Natural Resources Department has reviewed the materials and finds that the design is satisfactory in meeting the State's safeguarding requirements. Once the safeguarding has been implemented, which will occur sometime late this year, kindly make John Pfeil of my staff aware of this fact. Some pictures showing the final result would be appreciated.

You should direct any questions or comments related to this closure to John Pfeil at 827-1352.

Sincerely,

DIMBI

Douglas M. Bland, Director

### MARQUEZ DEVELOPMENT CORPORATION

March 6, 2000

Mr. John Pfeil New Mexico Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Dear Mr. Pfeil:

Pursuant to our telephone conversation of February 24, 2000 please find the following submittals for your review:

- 1. <u>Notice of Intention to Suspend Operations</u>—Form 12 ( with attachments)
- 2. Change of Registration/Ownership—Form 2

A timely response would be greatly appreciated, as we would like to commence mine decommissioning and safeguarding as soon as possible.

Should you have any questions or require further information, please contact me.

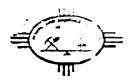
Thank you for your cooperation.

Sincerely,

K. E. McCorkle

**Vice President of Operations** 

E.McCorkle



STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

#### CHANGE OF REGISTRATION

Each mine, mill and smelter operator in New Mexico shall notify the Mining and Minerals Division in writing prior to any reactivation of operations, or any changes to the original information contained in Form 1, Mine/Mill/Smelter Registration. In the event of a change of ownership or operating company, complete the reverse side of this form in addition to the information requested below.

change of ownership or operating company, complete the reverse	side of this form in addition to the information requested below.
Name of Company: MARQUEZ DEVELOPME	ENT CORPORATION
Address Po Box 13958 ALBUQUER	QUE, NM 87192
Mine/Mill Name: MARQUEZ MINE & MARQ	UBZ HILL
Location: County Hc KINLEY 1/4-1/4 Sec	
Directions to Location if Unsurveyed:	
Name of Person in Charge: KENNETH E. Mc C	JORKLE
Tide: VICE PRESIDENT OF OPERATIONS	Telephone:(505) 247- 7008-
Address: PO BOX 13958	
ALBUQUERQUE, NM 87/92	
Effective Date of Change: 3-06-2000	· ·
Please describe any changes below:	
THE MARQUEZ MILL WILL BE	COMPLETELY DISMANTLED
THE MARQUEZ HINE WILL BE	E PERMANENTLY CLOSED.
•	
•	
W = 10 0 01	
3 E. Mc Corkle	Tide: VICE PRESIDENT OF OPERATIONS
Signature	
K.E. MC CORKLE  Name (please print)	Address: PO BOX 13958, ALBUQUERQUE N.M. 87192
	Telephone:(505) 247-9008
	Date signed: 3-06-2000

STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department .. Pacheco Street mt Fe, NM 87505

Telephone: (505) 827-5976 FAX No.: (505) 827-7195

### CHANGE OF OWNERSHIP OR OPERATOR

I. KENNETH B. H. CORKLE, of MARQU	EZ DEVELOPHENT CORPORATION
(Company) do hereby acknowledge the transfer for the purpose of o	whership and/or operation of the following mine, mill, or smelter
to - SEE ATTACHED SHEET -	(Company),
whose principal place of business is: MARQUEZ	NEW MEXICO
Mine, Mill or Smelter Name: MARQUEZ MINE	MSHA Number: 2901597
Location: County He KINLEY 1/4-1/4 Sec	Section 36 Township 13N Range 5W
Directions to Location if Unsurveyed:	
I hereby swear or affirm that the information herein provided is true, complete and correct.	of
Signature  K. E. He CORKLE  Name (piease print)	Signature
Name (please print)	Name (please print)
Title: VICE PRESIDENT OF OPERATIONS	Title:
Address: PO BOX 13958	Address:
ALBUQUERQUE, NM 87192	
Telephone (505) 247-9008	Telephone:( )
Date signed: 306-2000	Date signed:

#### CHANGE OF OWNERSHIP OR OPERATOR (FORM 2)

#### Please Note:

Marquez Development Corporation has leased the land on which the mine and mill are located from the Juan Tafoya Land Grant Corporation since 1977. The current lease will expire on 12/31/00. Marquez will not renew the lease.

Effective immediately upon lease expiration and/or termination, the Juan Tafoya Land Grant Corporation will assume all responsibilities for the maintenance of the mill and mine sites including the continual safeguarding of the mine and vent shafts.

All questions pertaining to the mine after the effective date of lease expiration/termination should be referred to:

Mrs. Ruth Armijo, President Juan Tafoya Land Grant Corporation 3081 Benny Rd. S.W. Albuquerque, N.M. 87105

Phone: 505-877-2530



Address: Po Box 13958

Mine or Mill Name: MARQUEZ MINE

STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department Mining and Minerals Division 2040 South Pacheco Street Santa Fe. NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195 -

# NOTICE OF INTENTION TO SUSPEND OPERATIONS

Name of Company: MARQUEZ DEVELOPMENT CORPORATION

ALBUDUEROUS

\_\_\_\_ MSHA Number:\_

For MMD use only

2901597

			Sec Se	ection_361	Cownship: 13N	Range 5 W
Start Up Date: Type of Opera	tion (please chec	ck):	pe filed with this fo	<del></del>		
	e Mine	Adit Insitu		eral Mined or Milled	Other	
Check One:	Permanent	<del></del>	•	s) on site at all times	-	
COMPLETIO	N OF SAFEGU	ARDING: (No	•	guidelines are availa	·	TIMETABLE FOR rom MMD).
6.E. 1	Mc Co	rkli		·		
Signature	Mc Co	rkli			For MMD use only	
Signature  K.E. M  Name (please)	MC CORKE	rkli E		Approved	•	pproved

#### NOTICE OF INTENTION TO SUSPEND OPERATIONS (FORM 12)

## ATTACHMENT A PERMANENT CLOSURE AND SAFEGUARDING

The permanent closure and safeguarding of the Marquez Mine will consist of the following tasks:

- 1) Mine dismantling and foundation removal
- 2) Backfill and site restoration
- 3) Permanent sealing of mine and vent shafts with concrete caps
- 4) Safeguarding
- 5) Final reclamation

List below are the key activities and estimated timetables associated with each task.

## Task 1 - Mine Dismantling and Foundation Removal (March 13 - March 27, 2000)

- Permanent electrical reconfiguration and disconnection of substation
- Asbestos containing material (ACM) removal/disposal
- Removal/disposal of fluids from mine equipment
- Dismantling of hoist building
- Removal of hoist and related mine equipment
- Removal of mine substation/switchgear
- Removal of hoist building foundation
- Dismantling and removal of headframe
- Analytical testing of soils
- Removal/disposal of petroleum impregnated soil--if required

It should be noted that some of the aforementioned activities may be conducted concurrently.

#### Task 2 - Backfill and Site Restoration (March 27 - April 5, 2000)

Clean native soil will be used as backfill for all voids resulting from foundation removal. All disturbed areas will be topped with 6" - 8" of native topsoil then graded and sloped in a manner that will divert surface water runoff away from the mine and vent shafts while matching the topography of the surrounding terrain (Refer attachment B- "Drainage")

## Task 3 - Permanent Sealing of Mine and Vent Shafts with Concrete Caps (April 5 - April 20, 2000)

Reinforced concrete caps will be constructed and placed over the mine and vent shaft openings in accordance with the approved design criteria as presented in Attachment "C"

Task 4 - <u>Safeguarding</u>
(April 24 - May 5,2000)

After the (reinforced) concrete has cured, the caps will be inspected for structural defects as well as to ensure that the shaft opening/cap interface is completely sealed. Repairs, if required, will be conducted immediately.

Safeguarding for both the mine and vent shafts will proceed as follows:

#### Mine Shaft

The open space between the concrete cap and the top of the sub-collar (i.e.@ surface elevation) will be back filled with clean native soil. A chain link security fence, 24'x 24' x 8' high, including a 1-foot extension arm (@45°angle) furnished with three separate strands of barbed wire will be installed around the surface of the sub-collar/shaft area.

Metal signs (24" x 30" each) will be positioned at the center of each outward facing side of the security fence. Signs will be fastened to the top fence bar with heavy-duty bolt clamps. The signs will have a white background with the following foreground lettering in both English and Spanish: **WARNING-DANGER** (in Red), **DO NOT ENTER** (in black). Letter sizing will be such that the signs can be read from a distance of 50 ft.

Rip-rap (24" - 36" diameter) will be placed along the outer perimeter of the security fence to prevent vehicle access to the area directly over the capped mine shaft. To ensure that no additional weight is applied to the mine shaft cap the rip-rap will be placed on the headframe support slab which encircles the subcollar/mine shaft support slab.

As an additional safeguarding feature, the existing mine compound chain link security fence (8' high including a 1 ft. extension arm furnished with three separate strands of barbed wire) will be left in place. The mine compound entrance gate will be secured by a heavy duty chain and pad lock.

#### Vent Shaft

Clean native soil will be spread over the vent shaft cap to form an earthen mound of approximately 2 ft. thick. A chain link security fence 12' x 20' x 8' high including a 1 ft. extension area (@45° angle) furnished with three separate strands of barbed wire will be installed around the perimeter of the vent shaft cap and earthen mound. The type and positioning of warning signs are identical to those described for the mine shaft (above).

Rip-rap (24" - 36" diameter) will be placed along the outer perimeter of the security fence, to prevent vehicle access to the area directly over the vent shaft cap. To ensure that no additional weight is applied to the vent shaft cap, the rip-rap will be

placed on the auxiliary hoist support slab which extends outward from the vent shaft collar concrete ring and support slab.

Task 5 - Final Reclamation (September - October, 2000)

Final reclamation of the mine site consists of:

- Final surface grading and contour (if required) Seeding and mulching with native seed mixtures.

#### NOTICE OF INTENTION TO SUSPEND OPERATIONS (FORM 12)

## ATTACHMENT B DRAINAGE

Surface water drainage will be diverted away from both the mine and vent shafts as described below:

#### Mine Shaft

The existing head frame support with drainage apron will remain in place. This slab was designed and constructed to provide support for the shaft sub-collar as well as to maximize precipitation and surface water drainage away from the mine shaft. Additionally, during site restoration, the area adjacent to the head frame support slab will be sloped to ensure that surface water drainage is directed away from the head frame support slab and mine shaft.

#### Vent Shaft

During site restoration, the existing ground surface adjacent to the east and west boundaries of the auxiliary hoist support slab will be graded and sloped to direct all surface water drainage away from the capped vent shaft.

### NOTICE OF INTENTION TO SUSPEND OPERATIONS (FORM 12)

# ATTACHMENT C MINE AND VENT SHAFT CAP DESIGN

CLIENT J. A. JOJES EUVIROJ MENTAL DATE 3/2/00 BY SE

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CLIENT JA JONES

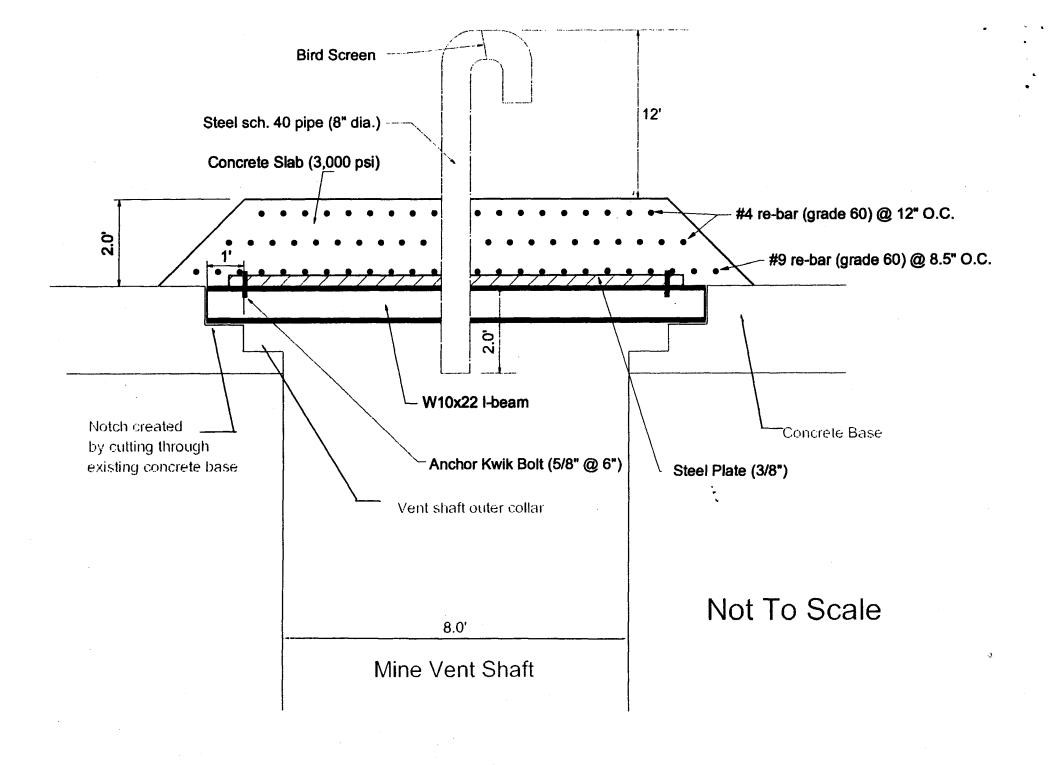
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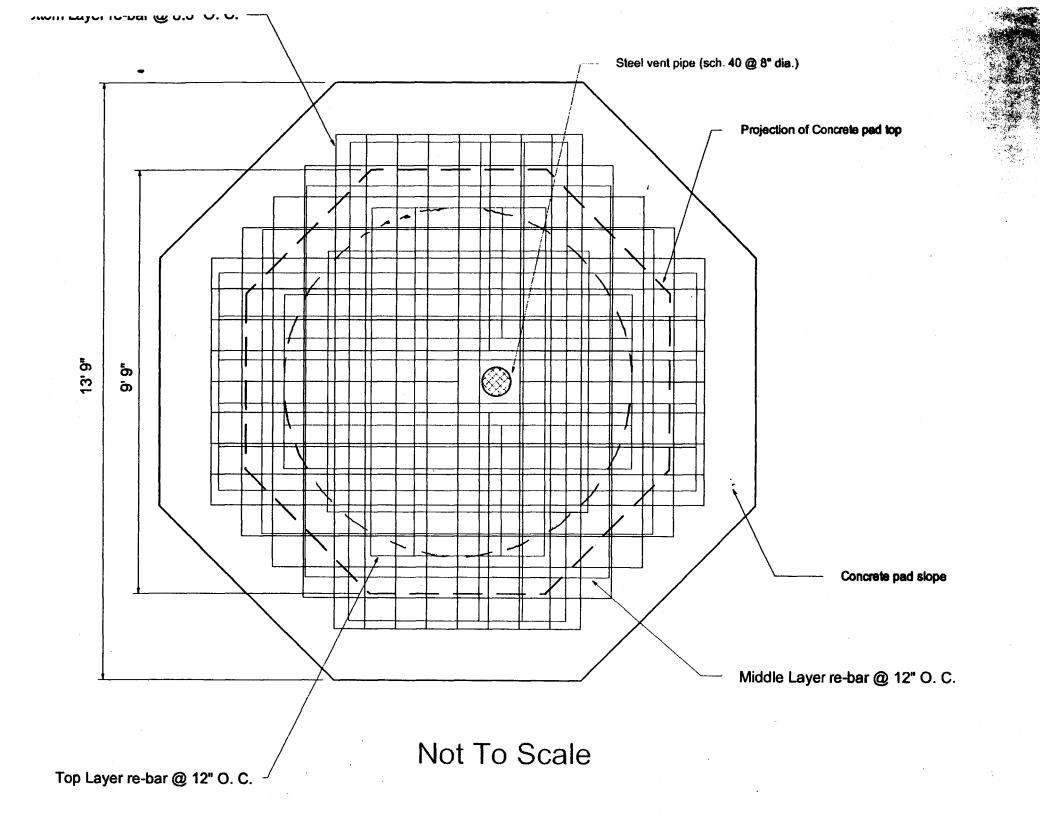
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2/21/00 page 10+5

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	LOAD (Note-strength of CORBEL ASSUMED O).  - NO DIAPHRAM ACTION OF COCRETE OR STITEL
W. Hald hay garan san, all continues	5-10" Soll 12" Cover
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g Marine da	FOR 1'0 Spaces M/S=07.12/B, Z = 3,7 KS 22.6
	FOR 3-0 SPACING $M = \omega l/2 = (0.625)(16)(16)/8 = 19.9$ $M/5 = (12)(19.9)/23.2 = 10.3$ KSI  CHECK SHEAR $\omega$
	V=(0.625)(B) =5 /4= 6.49 (2 /4.4 OF



5. Talmose 2/21/00 page 2 of 5

 $\frac{75}{W} = \frac{75}{125} + \frac{15}{25.5} = \frac{100.5}{100}$   $M = \frac{125}{8} = \frac{(0.200)(3)}{8} = 0.225$ 5=1/6t - 1(12)(5/8) = 0.7B1 M/= (0.225) (12)/0.781 = 34 << 22 ok USE 5/8 W/ WIOX 22 SANCED M= wl/8 = (1.623 1/2)(17)(16)/8 = 51.9 1K For d= 12" bd/2000 = (12)(12)/2000 = 0,144 Ku= 51.9 = 360 FROM ACI DEGIGN HANDBOOK for K=369 fy= 40000 p=0.0075 P= AS ASREGO = (0.0075)(12) = 1.08

# 9 @ 10" (A= 1.20)



5 Palmrose 2/27/20 page 3 of 5

CHECK SHEAR V = (1.623)(8) = 12.98 V = 2V = 4

 $=(2\sqrt{3000})(12)(12)$ = (110)(12)(12) = 15,774 > 12,980



9. Kalmrove 2/27/00 page 4 of 5

gyro nyakuro o na Makuro Mkara 2008 kangan kapangan kaburan da a na a	COT NOT THE PROPERTY OF THE PR
ja, z lib kund dili di manja uda ja ya ya wa diwalili	DESIGN FOR VENT GP
	SINCE SIMILAR TO MINESTAFT EXCEPT SMALLER DISTRIBLE AND NO SOIL LONG, THE SAME DESIGN IS CONSERVATIVED
	NOTE: SUPPORT OF CAP AT VENT ! MINE SHAPTS  HAS NOT BEEN EVALUATED
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2/29/20 pge 5 of 5

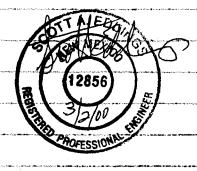
In Discussions of Mr. D. Osmon of JAJES he did not want to reduce the concrete thickess or spacing do bears

Therefore check vent shoft  $5/8^{\prime\prime}$  PL  $w = 325.5^{*\prime}/6^{\prime\prime}$  M = (0.325)(3.33)/8 = 0.45 $M_{\beta} = (6.45)(12)/0.781 = 6.92 4 12 26$ 

W = (347.5)(3.33) = 1,157  $M = (1.157)(0)^{2}/8 = 14.5^{11}$   $f_{1} = (14.55)(12)/23.2 = 17.48 < 22$ 

Sollen Lisane No. 2953

Phone Ma. 1-865-241-4189





Sov Rlmm California Lescense No. 29563

	Job No. 092	Date 02/28/2000
lium Mine Demolition	File Name	Rev. No.
	Scale	DWG No.
ez. New Mexico	Not to Scale	092 - 02

MINING AND MINERALS DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-5970

Jennifer A. Salisbury Cabinet Secretary

Douglas M. Bland DIVISION DIRECTOR

February 17, 2000

Mr. K.E. McKorkle C/O Marquez Development Corporation P. O. Box 13958 Albuquerque, NM 87192

Dear Mr. McKorkle:

This letter responds to your letter of January 10, 2000 requesting review and comment on preliminary design drawings and calculations for a cap to permanently seal the Marquez Mine and vent shafts. The Marquez Mine is located in McKinley County, NM and is being closed pursuant to the NM mine safeguarding requirements (19 NMAC 7.2).

The Mining and Minerals Division of the Energy, Minerals and Natural Resources Department has reviewed the preliminary materials and finds that the design should be satisfactory in meeting the state's safeguarding requirements. John Pfeil of my staff has informed me that all issues raised during the review have been satisfactorily resolved.

The next step in the procedure is for you to finalize the safeguarding plan for our review. It is understood that the centerpiece of that plan will be the preliminary materials we just reviewed, and other information including the submittal of a Form 12 (Notice of Intent to Suspend Operations) and a Form 2 (Change of Registration/Ownership) if the land is transferred to another party.

Please keep in mind that our review only addresses mine safeguarding requirements under the jurisdiction of MMD, and we can not comment on whether or not your proposed closure methods will meet the requirements of any other program or agency.

I would like to commend you for your attention to detail on this subject. Your proactive stance on closure and your open communication with the Division serves the process well. You should direct any questions or comments related to closure to John Pfeil at 827-1352.

Sincerely,

Douglas M. Bland, Director

Note To File!

All of the consume on the Ittalial mater were addressed in a convenention with Ken McKorbbe on 2-16-00.

. John TPL

Does shaft

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If not, there is a potential for

priping on

outside

Boyd white Nat Energy found 801 908 5800

Positive drainage above shaft by mounding dirt fill

what is sub-celler comprised of?

- mention discussion of went pipe

  i) potential for at burns an attractive

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  - 2) once There The potential exists for inhalation of radon gas, which will almost curtainly escape around The cap anyway
- Safignarding rugs regnire submission of NISO

  30' Thick 18#

### MARQUEZ DEVELOPMENT CORPORATION

#### **CERTIFIED: P 428 995 538**

January 10, 2000

Mr. Doug Bland, Director New Mexico Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Dear Mr. Bland:

Pursuant to our telephone conversations in which we discussed Marquez' intention to use concrete slabs (caps) to permanently seal the Marquez mine and vent shafts, please find enclosed <u>preliminary</u> design drawings and calculations relating to the proposed caps for your review and comments.

A timely response from your staff would be greatly appreciated as we would like to finalize our design and construction work plan.

Should you have any questions or require further information, please contact me.

Thank you for your cooperation.

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Sincerely,

K. E. McCorkle

**Vice President of Operations** 

9 E. Mc Corkle

### **CALCULATIONS AND DESIGN FOR MINESHAFT CAP**

### Design No. Two (I-beam laid on top of sub-collar)

- 1. Total weight (not including I-beams) over the Mineshaft Span (16 feet diameter)
- (1) Area in calculation

$$(16 \text{ ft}/2)^2 \times 3.1416 = 201.06 \text{ ft}^2$$

Steel Plate (5/8") (2)

$$25.5 \text{ lbs/ft}^2 \times 201.06 \text{ ft}^2 = 5,127.03 \text{ lbs}$$

Concrete Slab (3,000 psi, 2' thickness) (3)

(4) Dirt fill (sand, wet, packed, 4.17' thickness)

Steel Sch. 40 Venting Pipe (12" dia. approx. 25 linear feet) (5)

$$25 \text{ ft x } 54 \text{ lbs/ft} = 1350 \text{ lbs}$$

Re-Bars in Concrete (#5, 801.3 ft/layer) (6)

$$801.3 \text{ ft x } 3 = 2,403.936 \text{ ft}$$
  
2,403.936 ft x 1.04 lbs/ft = 2,500.09 lbs

Total weight over the mineshaft's 16 ft dia. span: 178,289.75 lbs

2. To determine the number of W10 x 22 I-beams that are needed

Average weight per square foot: 
$$178,289.75 \text{ lbs } / 201.06 \text{ ft}^2 = 886.749 \text{ lbs/ft}^2$$

1<sup>st</sup> beam

- Area over which load will be borne by the subject I-Beam. This figure = L x W, where L is the span length of the I-Beam over the mineshaft and W is the width of I-Beam flange plus half of the distance to the adjacent I-Beams on both sides. In the case of I-Beam #1, L is 16' and W is 0.5' (flange width 6") + 0.1667' (half distance to adjacent I-Beam 2") x = 2 (both sides) = 0.833' (10"), that is L x W = 16' x 0.833' = 13.33 ft<sup>2</sup>. Table 2 lists the L values for I-Beams at different locations.
- Allowable Uniform Load for an I-Beam W10 x 22 over a specific span distance. Refer to attached table from Manual of Steel Construction - Allowable Stress Design.

2<sup>nd</sup> beam

$$886.749 \text{ lbs/ft}^2 \times 13.208 \text{ ft}^2 = 11,712.181 \text{ lbs}$$

$$23,000 \text{ lbs} / 11,712.181 \text{ lbs} = 1.964 \text{ (factor of safety)}$$

 Table 2
 I-Beam Span Length Over The Mineshaft

I-Beam #	1	2	3	4	5	6	7	8
Span Length (ft)	16.00	15.913	15.651	15.204	14.229	12.752	9.789	3.299

Therefore, a total of 15 I-beams (W10 x 22) are needed to support the total of 178,289.75 lbs weight over the span with factor of safety of at least 1.70.

#### 3. Total weight in the mineshaft

- (1) Total area in calculation 18 ft x 18 ft = 324 ft<sup>2</sup>
- (2) Steel Plate (5/8") 25.5 lbs/ft<sup>2</sup> x 324 ft<sup>2</sup> = **8,262 lbs**
- (3) Concrete Slab (3,000 psi, 2' thickness)  $324 \text{ ft}^2 \times 2 \text{ ft} = 648 \text{ ft}^3$  $648 \text{ ft}^3 \times 150 \text{ lbs/ft}^3 = 97,200 \text{ lbs}$
- (4) Dirt Fill (sand, wet, packed, 4.17' thickness)  $324 \text{ ft}^2 \times 4.17 \text{ ft} = 1,351.08 \text{ ft}^3$   $1,351.08 \text{ ft}^3 \times 130 \text{ lbs/ft}^3 = 175,640 \text{ lbs}$
- (5) Steel Sch. 40 Venting Pipe (12" dia. 25 linear feet)
  25 ft x 54 lbs/ft = **1,350 lbs**

(6) Re-bars in Concrete (#5, 1,260 ft/layer) 1,260 ft x 3 = 3,780 ft3,780 ft x 1.04 lbs/ft = 3,931.2 lbs

(7) I-Beams (W10x30 at 18' each, total 13) 30 lbs/ft x 18 ft x 13 = 7,020 lbs

Total weight:

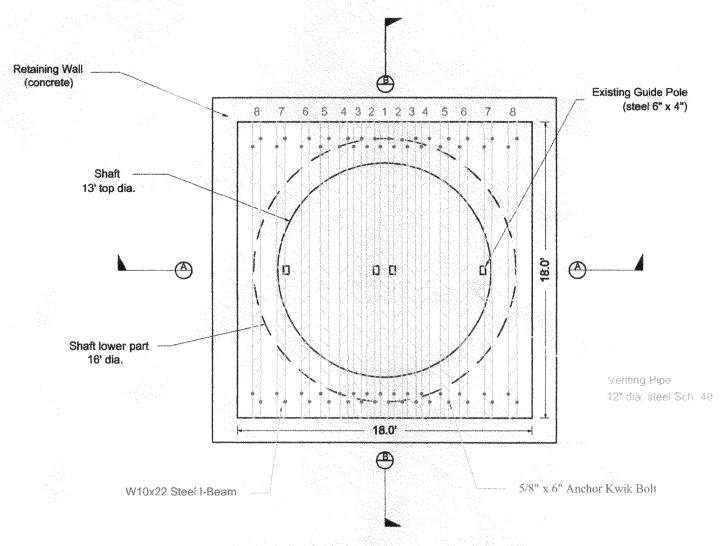
293,403.2 lbs

Average weight per square foot:

293,403.2 lbs / 324 ft<sup>2</sup> =  $905.565 lbs/ft^2$ 

### DESIGN NO. 2

### I-Beams on Top of Sub-Collar



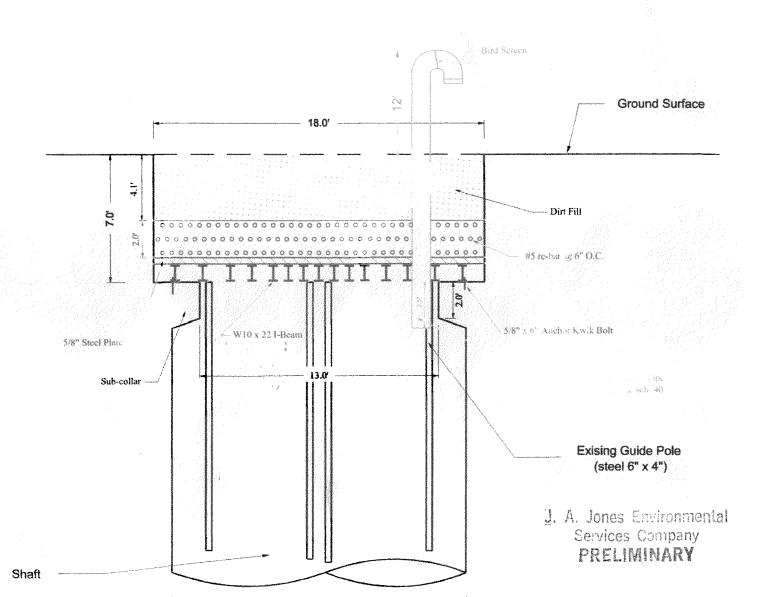
### I-Beam Layout Distance (flange to flange)

1-2	2 - 3	3 - 4	4 - 5	5-6	6 - 7	7 - 8
4 in.	4 in.	4 in.	8 in.	βin.	12 in.	12 in.

J. A. Jones Environmental Services Company PRELIMINARY

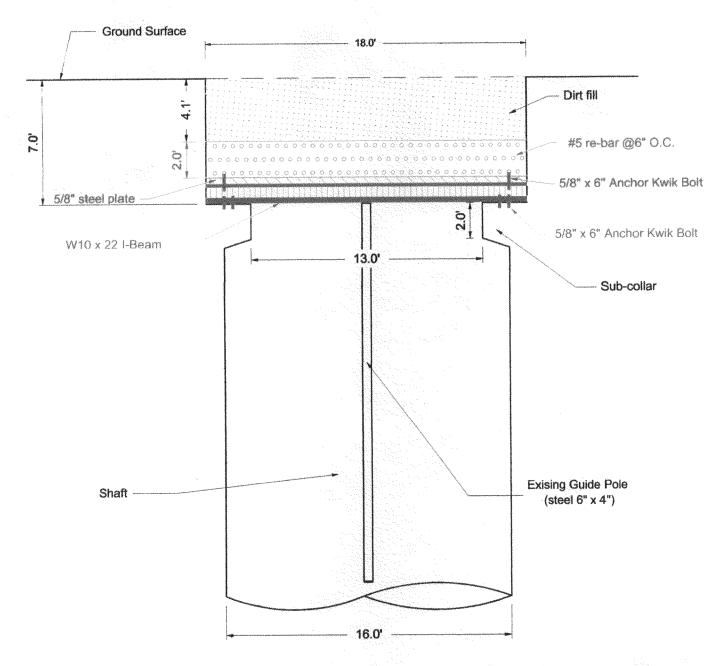
## DESIGN No. 2 I-Beams on Top of Sub-Collar (contin.)

Section A - A'



# DESIGN No. 2 I-Beams on Top of Sub-Collar (contin.)

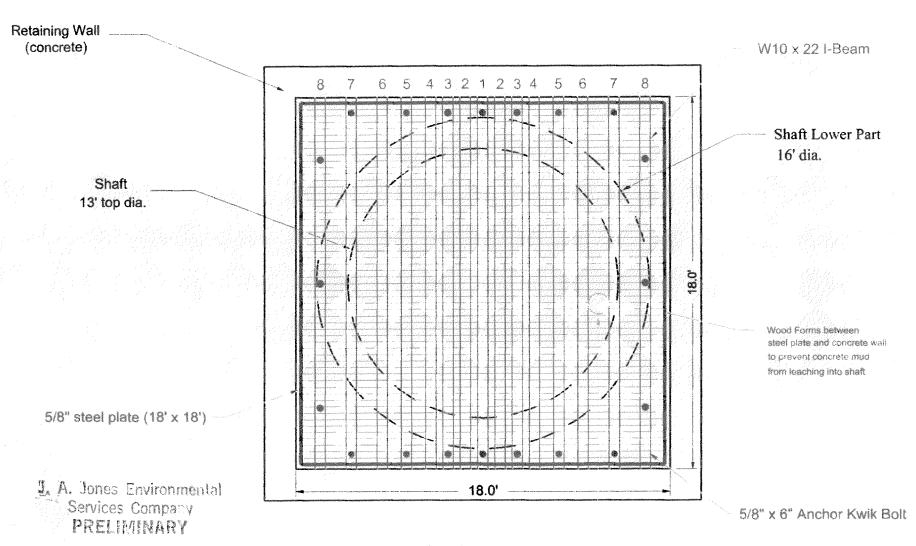
Section B - B'



J. A. Jones Environmental Services Company PRELIMINARY

## DESIGN No. 2 I-Beams on Top of Sub-Collar (contin.)

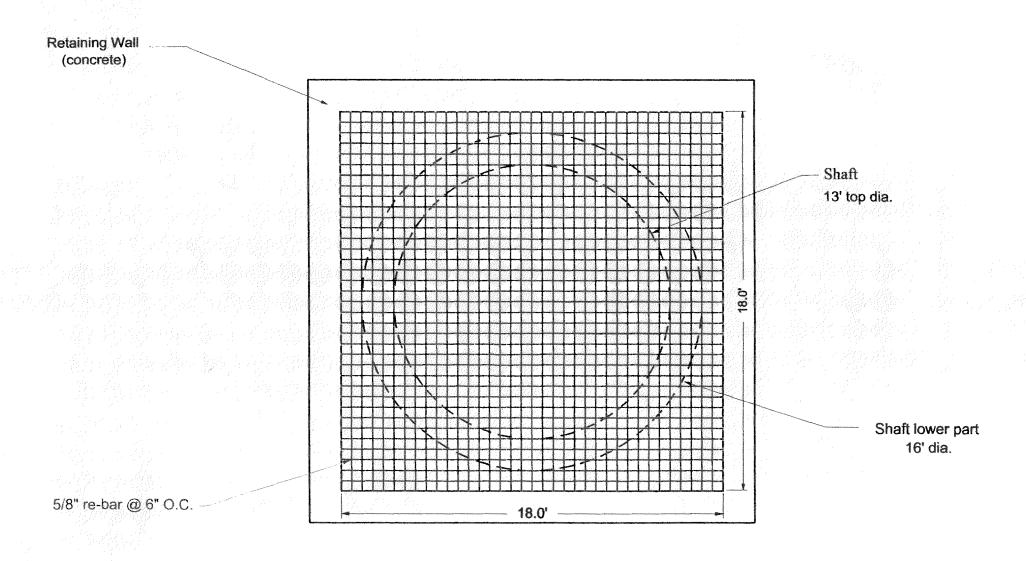
### STEEL PLATE LAYOUT



Venting pipe

Steel with 10 10 10 10 10 80.

### **CONCRETE RE-BARS LAYOUT**



# Manual of

# STEEL CONSTRUCTION

# Allowable Stress Design

NINTH EDITION

American Institute of Steel Construction, Inc.

1 East Wacker Drive, Suite 3100
Chicago, Illinois 60601



 $F_y = 36 \text{ ksi}$ 

**BEAMS**  $F_{\rm v} = 36 \; {\rm ksi}$ W Shapes

Allowable uniform loads in kips for beams laterally supported

For beams laterally unsupported, see page 2-146

W 10

- w 10 T			W 10			W 10							
	Designation W 10		33	30	26	22	19	17	15	12	Defication		
	Wt./ft Flange Width		45	39 8	8	53/4	53/4	53/4	4	4	4	4	Deflection In.
Flan		otn	8		8.40	6.10	6.10	6.10	4.20	4.20	4.20	3.90	****
ļ	Lc		8.50 22.8	8.40 19.8	16.5	13.1	11.4	9.40	7.20	6.10	5.00	4.30	
ļ	L <sub>v</sub>	_	22.0	19.0	10.5	13.1	11.7	3.40	7.20	70	66	54	.02
1		3 4			.	]			74	64	55	43	.04
1		5				90	77	70	60	51	44	35	.06
1		6	400		81 79	86 73	74 63	61 52	50 43	43 37	36 31	29 25	.09 .12
		7 8	102 97	90 83	69	64	55	46	37	32	27	22	.16
		9	86	74	62	57	49	41	33	29	24	19	.20
		10	78	67	55	51	44	37	30	26	22	17	.25
		11	71	61	50	47	40	33	27 25	23	20 18	16 14	.30 .35
1		12	65 60	56 51	46 43	43 39	37 34	31 28	23	20	17	13	.33 .42
1		14	56	48	40	37	32	26	21	18	16	12	.48
1_	<b>-</b> ≥	16	49	42	35	32	28	23	19	16	14	11	.63
	"	18	43	37	31	29	25	20	17	14	12	10 8.6	80 .98
	<b>5</b>	20 22	39 35	33	28 25	26 23	22	18	15 14	12	10	7.8	1.19
36 ksi	n.	24	32	28	23	21	18	15	12	11	9.1	7.2	1.42
l i	Span in Feet						ł					1 1	
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	S <sub>x</sub> in	3	49.1	42.1	35.0	32.4	27.9	23.2	18.8	16.2	13.8	10.9	_
- 1	<i>V</i> ki	ps	51	45	41	45	39	35 10.7	37 12.1	35 10.7	33 9.39	7.05	For explanation
	R₁ ki R₂ ki		26.0 8.32	21.0 7.48	18.3 6.89	16.7 7.13	13.5   6.18		5.94	1 5.70	5.46	4.51	of deflection.
1	<i>R</i> ₃ ki	ps	33.3	26.3	21.0	23.9	17.9	14.4	16.0	13.8	111.7	7.74	see page 2-32
	R₄ki Rki	ps/in ns	. 4.19 48	3.64 39	3.53 33	3.09 35	2.37 26	2.31 22	2.36	3 2.54 23	2.76	15	
-	R kips   48   39   33									<del></del>			·

Load above heavy line is limited by maximum allowable web shear.

**BEAMS** W 8

W Shapes

Allowable uniform loads in kips for beams laterally supported

For beams laterally unsupported, see page 2-146

<del> </del>	To boards laterally drisupported, see page 2-146								
<b>├</b> ─	Designation	on		<del></del>		W 8			
<b> </b>	Wt./ft		67	58	48	40	35	31	Deflection
<u> </u>	lange Wid	lth	81/4	81/4	81/8	81/6	8	8	In.
	L <sub>c</sub>	<del></del>	8.70	8.70	8.60	8.50	8.50	8.40	7 "
	Lu	<del></del>	39.9	35.3	30.3	25.3	22.6	20.1	
$F_{\rm y}=36~{ m ksi}$	Span in Feet	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	39.9 148 137 120 106 96 87 80 74 68 64 60 56 53 50 48	35.3 129 118 103 92 82 75 69 63 59 55 51 48 46 43 41	98 86 76 69 62 57 53 49 46 43 40 38 36 34	25.3 86 80 70 62 56 51 47 43 40 37 35 33 31 30 28	22.6 72 71 62 55 49 45 41 38 35 33 31 29 27 26 25	20.1 66 62 54 48 44 40 36 34 31 29 27 26 24 23 22	.11 .15 .20 .25 .31 .37 .44 .52 .60 .69 .79 .89 1.00 1.11 1.23
ļ <u>l</u>			D	roperties	and Res	tion Vet			
	Properties and Reaction Values  S <sub>x</sub> in. <sup>3</sup> 60.4 52.0 43.3 35.5 31.2 27.5								
١ ١	/ kips		74	64	49	35.5 43	31.2 36	27.5 33	For
	R kips	j	48.7	39.8	28.2	22.7	18.4	15.9	explanation
	?₂ kips/in ?₃ kips	.	13.5 84.9	12.1 66.9	9.50	8.55	7.37	6.77	of deflection,
	-3 MPC		34.5	00.9	42.7	33.0	24.8	20.5	see page 2-32

Load above heavy line is limited by maximum allowable web shear. Values of R in **bold face** exceed maximum web shear V.

13.5

R4 kips/in.

R kips

11.5

6.73

53

6.18

4.54

35

4.07

see page 2-32

#### CALCULATION FOR VENT SHAFT CAP

- 1. Area in calculation  $(9.833 \text{ ft}/2)^2 \times 3.1416 = 75.94 \text{ ft}^2$
- 2. Steel Plate (3/8", 15.30 lbs/ft<sup>2</sup>) 15.30 lbs/ft<sup>2</sup> x 75.94 ft<sup>2</sup> = **1.161.88 lbs**
- 3. Concrete Slab (3,000 psi, 2' thickness, 150 lbs/ft<sup>3</sup>)  $75.94 \text{ ft}^2 \times 2 \text{ ft} = 151.88 \text{ ft}^3$  $150 \text{ lbs/ft}^3 \times 151.88 \text{ ft}^3 = 22,782 \text{ lbs}$
- 4. Steel sch. 40 Venting Pipe (8" dia. 17 linear feet, 29 lbs/ft)
  17 ft x 29 lbs/ft = **493 lbs**
- 5. Re-Bars in concrete slab (#5, 3 layers, 302.25 ft/layer, 1.04 lbs/ft) 302.25 ft x 3 = 906.75 ft 906.75 ft x 1.04 lbs/ft = 943.02 lbs

Total: 25,379.9 lbs

Load per square foot

 $25,379.9 \text{ lbs} / 75.94 \text{ ft}^2 = 334.21 \text{ lbs/ft}^2$ 

From the table on page 2-70 of *Manual of Steel Construction, Allowable Stress Design*, allowable load on a W10x22 I-Beam with span distance of 10 feet is 37,000 pounds. Therefore, assume that each of the two I-beams bears load on an area of

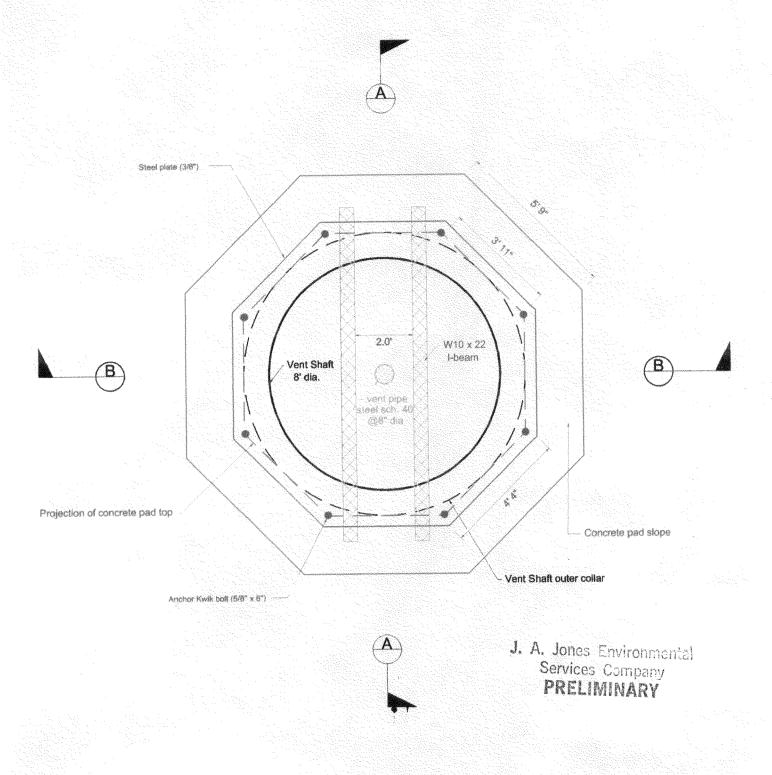
$$9.4 \text{ ft } \times 2.5 \text{ ft} = 23.5 \text{ ft}^2$$

where 9.4 ft is the I-beam span length over the vent shaft, and 2.5 ft is the sum of the width of I-beam flange plus half distance to the adjacent I-beam or shaft edge on both sides.

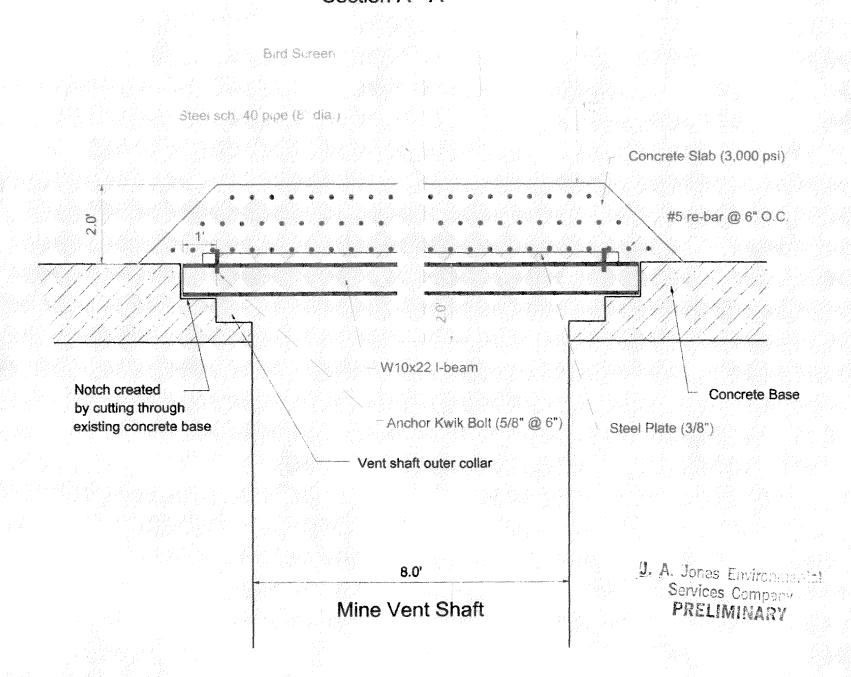
it comes:

334.21 lbs/ft<sup>2</sup> x 23.5 ft<sup>2</sup> = 7,853.94 lbs 37,000 lbs / 7,853.94 lbs = 4.71 (factor of safety)

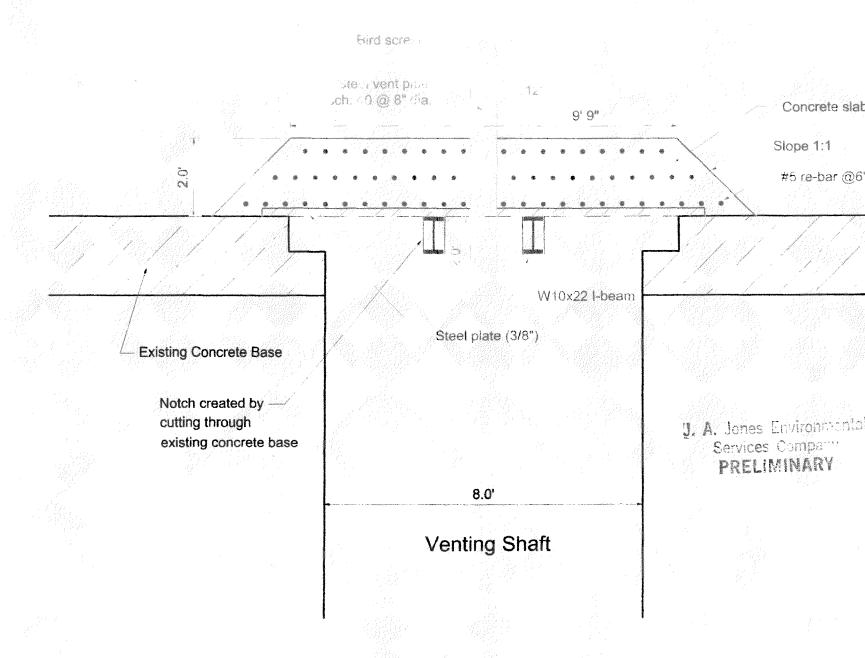
# DESIGN FOR VENT SHAFT CAP



## DESIGN FOR VENT SHAFT CAP Section A - A'



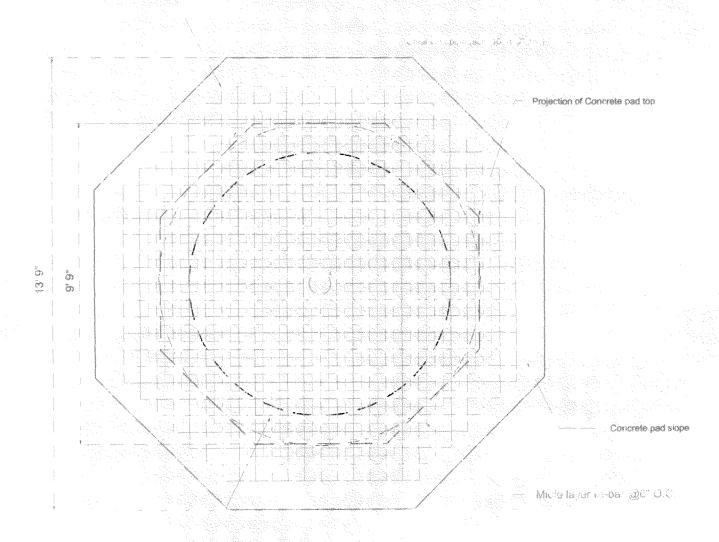
# DESIGN FOR VENT SHAFT CAP Section B - B'



## DESIGN FOR VENT SHAFT CAP

## Conrete Re-Bar Layout

Bottom layer re-bar @6" O.C.



Top layer re-bar @6" O.C.

J. A. Jones Environmental Services Company PRELIMINARY

## Manual of

# STEEL CONSTRUCTION

# Allowable Stress Design

NINTH EDITION

American Institute of Steel Construction, Inc.

1 East Wacker Drive, Suite 3100

Chicago, Illinois 60601



$F_{v} =$	36	ksi
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### **BEAMS** W Shapes

### Allowable uniform loads in kips for beams laterally supported For beams laterally unsupported, see page 2-146

1	For beams laterally unsupported, see page 2-140												
Designation W 10				W 10			W	10					
Wt./It		45	39	33	30	26	22	19	17	15	12	Deflection	
Flange Width		8	8	8	5¾	5¾	5¾	4	4	4	4	in.	
	Lc		8.50	8.40	8.40	6.10	6.10	6.10	4.20	4.20	4.20	3.90	,
	Lu		22.8	19.8	16.5	13.1	11.4	9.40	7.20	6.10	5.00	4.30	
		3		1					74	70	66	54 43	.02 . .04
		4			}	90	77	70	7 <u>4</u> 60	64 51	55 44	35	,0 <del>4</del>
		5 6			81	86	74	61	50	43	36	29	.09
		7	102	90	79	73	63	52	43	37	31	25	.12
		8	97	83	69	64	55	46	37	32	27	22	.16
		9	86	74	62	57 51	49 44	41 37	33 30	29 26	24 22	19 17	.20 .25
1		10 11	78 71	67 61	55 50	47	40	33	27	23	20	16	.30
		12	65	56	46	43	37	31	25	21	18	14	.35
1		13	60	51	43	39	34	28	23	20	17	13	.42
1		14	56	48	40	37	32	26	21	18	16	12	.48
1	'	16	49	42	35	32 29	28 25	23 20	19 17	16	14 12	11 10	.63 .80
1		18 20	43 39	37 33	31 28	26	22	18	15	13	11	8.6	.98
.2	8	22	35	30	25	23	20	17	14	12	10	7.8	1.19
36 ksi	Ľ.	24	32	28	23	21	18	15	12	11	9.1	7.2	1.42
1 8	Span in Feet		Ì	Ì						1			
ω <sup>×</sup>	ß						1				l	1 1	
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$\vdash$	S <sub>x</sub> in	3	49.1	42.1	35.0	32.4	27.9	23.2	18.8	16.2	13.8	10.9	
1	V ki	ps	51	45	41	45	39	35	37	35	33	27	For
	R, ki		26.0 8.32		18.3 6.89	16.7 7.13	13.5 6.18	10.7 5.70	12.1 5.94	10.7 5.70	9.39 5.46		explanation of deflection,
	<i>R</i> ₂ ki <i>R</i> ₃ ki		33.3	7.48 26.3	21.0	23.9	17.9	14.4	16.0	13.8	11.7	7.74	see page 2-32
1	$R_4$ ki	ps/in	. 4.19			3.09 35	2.37 26	2.31	2.36	2.54 23	2.76 21	2.03	,
-	R ki		48	39	is limit	ل			ш			1.5	l
	Load above heavy line is limited by maximum allowable web shear.												

### **BEAMS** W Shapes

 $F_y = 36 \text{ ksi}$ 

Allowable uniform loads in kips for beams laterally supported For beams laterally unsupported, see page 2-146

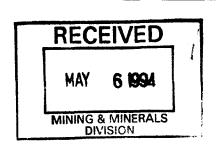
Dealess		7			orted, se	paye 2	140	
Designa			<del></del>	<del></del>	W 8			
Wt./I		67	58	48	40	35	31	Deflection
Flange V	viatn	81/4	81/4	81/6	81/9	8	8	In.
L <sub>c</sub>	<del></del>	8.70	8.70	8.60	8.50	8.50	8.40	
L_u		39.9	35.3	30.3	25.3	22.6	20.1	
F <sub>y</sub> = 36 ksi Span in Feet	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	148 137 120 106 96 87 80 74 68 64 60 56 53 50 48	129 118 103 92 82 75 69 63 55 51 48 46 43 41	98 86 76 69 62 57 53 49 46 43 40 38 36 34	86 80 70 62 56 51 47 43 40 37 35 33 31 30 28	72 71 62 55 49 45 41 38 35 33 31 29 27 26 25	66 62 54 48 44 40 36 31 29 27 26 24 23 22	.11 .15 .20 .25 .31 .37 .44 .52 .60 .69 .79 .89 1.00 1.11 1.23
S <sub>x</sub> in. <sup>3</sup>		60.4	52.0	43.3	35.5	31.2	27.5	T-
V kips R <sub>1</sub> kips	74 48.7	64 39.8	49	43	36	33	For	
R₂ kips/i	13.5	39.8 12.1	28.2 9.50	22.7 8.55	18.4 7.37	15.9 6.77	explanation	
R <sub>3</sub> kips		84.9	66.9	42.7	33.0	24.8	20.5	of deflection, see page 2-32
. R₄ klps/l R kips	ln.	13.5 <b>96</b>	11.5 <b>82</b> 1 by maxi	6.73 <b>61</b>	6.18	4.54	4.07 <b>35</b>	TOO Page 2.02

Values of R in **bold face** exceed maximum web shear V.

#### MARQUEZ DEVELOPMENT CORPORATION P.O. BOX 13958 ALBUQUERQUE, NEW MEXICO 87192

April 27, 1994

Ms. Kay Hatton
Mine Program Manager
State of New Mexico
Mining and Minerals Division
P.O. Box 6429
Santa Fe, New Mexico 87502-6429



Dear Ms. Hatton:

Pursuant to our conversation of 4/26/94 regarding "current maps and surveys" of the Marquez mine, please note for your file that the shaft sinking phase of the Marquez mine has never been completed and that Marquez Development Corporation has no plans of completing shaft sinking in the near future.

Considering the present status of the Marquez mine, the submittal of maps and surveys of the "workings of the mine" are not required at this time.

Should shaft sinking be completed and plans for mine development be entertained by Marquez Development Corporation, all appropriate maps and surveys will be submitted to your office in accordance with rule: EMNRD NMD 89-1.

Thank you for your assistance in this matter.

Sincerely,

E. Mc Corle

K.E. McCorkle Operations Manager

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$\chi_1$	4	REC	CEI	/ED

### MINE/MILL/SMELTER RESISTRATION

Name of Mine/Mill Smelter: MARQUEZ M	VING & MINERALS ADDRESSION THAT QUEZ HILL
Name of Operator: MARQUEZ DEVELOP	PHENT CORP. Telephone: <u>505-247-9008</u>
Address: P.O. BOX 13958 ALBUT	
Name of Previous Operator (if applicable): PA	
	Sec. <u>36</u> Township <u>/3N</u> Range <u>5W</u>
,	
USGS Quadrangle Map Name: N/A	
MSHA Number: 2901597	
Type of Operation: (please check)	
MINE: Surface Adit In Situ Le	Other (describe)
Mill X Smelter	Heap Leach
Mineral or Commodity Produced: HILL HAN	VE NEVER BEEN COMPLETED - NO ROM THE HINE NOR PROCESSED AT THE HILL
Mineral Estate Owner: Name MARQUEZ D Address Po. Box 1393 Telephone 505	EVELOPMENT CORP 18 ALBUQUERQUE, N.M. 87192 - 247-9008
Surface Estate Owner: Name HARQUEZ ( Address P.O. BOX 139 Telephone 505	DEVELOPHENT CORP. 158 ALBUQUERQUE, N.H. 87192. -247-9008
Mineral Estate Classification: (Please check)	
State Federal Indian	Private X
I hereby swear or affirm that the information herein provided is true, complete and correct.  Signature  FACILITIES & SITE  Title: OPERATIONS MANAGER  Address: MARQUER DEUELOPMENT CORP  PO BOX 13958  ALBOPUERQUE, N.M. 87192  Date: 2-2-93	DO NOT WRITE IN THIS SPACE  Registration Number Assigned By: Signature  Title: Date:

Mining and Minerals Division 525 Camino de los Marquez Santa Fe, NM 87503

Division 4/
Name of Mine/Mill Smelter: MARQUEZ PROSE & MARQUEZ MILL  Name of Operators MARQUEZ DELIES OF REPLENDING: 505-247-9008
Name of Operator: MARQUEZ DEVELOPMENT CORP. Telephone: 505-247-9008
Address: P.O. BOX 13958 ALBUQUERQUE, N.H. 87192
Name of Previous Operator (if applicable): BOKUM RESOURCES CORP.
Location: County McKINLEY 1/4-1/4 - Sec. 36 Township 130 Range 5W
Directions to Location if Unsurveyed: VIA
USGS Quadrangle Map Name: NAM
MSHA Number: 2901597
Type of Operation: (please check)
MINE: Surface Adit Other (describe) Shaft In Situ Leach
Mill X Smelter Heap Leach
Mineral or Commodity Produced: MINE & MILL HAVE NEVER BEEN COMPLETED - NO DRAVIUM ORE HAS BEEN PRODUCED FROM THE MINE NOR PROCESSED AT THE MILL
Mineral Estate Owner: Name HARQUEZ DEUELOPHENT CORP.  Address P.O. BOX 13958 ALBUQUERQUE, N.M. 87192  Telephone 505-247-9008
Surface Estate Owner: Name HARQUEZ DE USIOPHENT CORP.  Address P.O. BOX 13958 ALBUQUERQUE, W.H. 87192  Telephone 505-247-9008
Mineral Estate Classification: (Please check)
State Federal Indian Private
I hereby swear or affirm that the information herein provided is true, complete and correct.  DO NOT WRITE IN THIS SPACE

Mr. E. Mc Corkle Signature

Title: FACILITY & SITE ODERATION 'idress: HARQUET DE VELOPHENT CORP PO. Kex 13958 NM. 87192

Date: 2-7-92

DO NOT WRITE	IN THIS SPACE
Registration Number	
By:	
Sigi Title:	oature
Date:	



Mining and Minerals Division 525 Camino de los Marquez Santa Fe, NM 87503

DO NOT WRITE IN THIS SPACE

Each mine, mill and smelter operator in New Mexico shall notify the Mining and Minerals Division in writing prior to any suspension of operations, reactivation of operations, and any changes to the original information contained in Form 1, Mine/Mill/Smelter Registration. In the event of a change of ownership or operator, complete the reverse side of this form in addition to the information requested below.

Name of Operator: MARQUEZ DEVELOPMENT CORP.
Address: Pro. MOK 19958 ALBUDUERQUE, W.H. 87192
Mine Name: HARQUEZ HINE & HARQUEZ MILL MSHA Number: 2901.597
Location: County HCKINLE 1/4-1/4 Sec. 36 Township 13N Range 5W
Directions to Location if Unsurveyed: 1914
Name of Person in Charge: K.E. MC CORKLE
Title: FACILITY & SITE OPERATIONS HAWAGER Telephone: 505-247-9008
Address: HARQUEZ DEVELOPHENT CORP.  DO. BOX 13958 ALBUQUERQUE, N.H. 87192
DO BOX 13958 ALBUQUERCOUE, N.H. 87192
T

Please describe any changes below:

A CHANGE IN OWNERSHIP AND COMPANY WANE ONLY. NO CHANGES IN THE STATUS OF GITHER THE MINE OR MILL SITES OR FACILITIES, SITE AND FACILITY PERSONNEL ALSO REMAIN UNCHANGED.

Signed by: B.E. MIC COLDE Title: FACILITY & SITE OPERATIONS HANAGE. Address: D.O. BOX 13958 ALBUX CERCUE, D.M. Date: 2-7-92
Telephone: 505-247-900}

87192

I, K.E. MCCORKLE of BOK acknowledge the transfer for the purpose of owners smelter to MARCOUSE DEVELOPMENT (co.	and/or elevation of the following mine, mill, or
is P.O. BOX 13958 ALBUQUERQUE,	NM. 81112
Mine, Mill or Smelter Name: HARQUEZ HINE & H	122 MSHA Number: 2901597
Location: County Mc KINLEY 1/4-1/4_	Sec. 36 Township 13N Range 5W
Directions to Location if Unsurveyed:	
I hereby swear or affirm that the information herein provided is true, complete and correct.	I, K.E. MC CORKLE of MARCO DE DEVELOPHENT CORP. (Company) have read the foregoing statement and accept such transfer, also the responsibility of ownership and/or operation of said mine, mill or
1/0 11 0 . 10.	smelter.

Com.

K.E. Mc Corbbi

Title: HING-HILL MANAGER
BOKUM RESOURCES CORP-

11-18-9 Date:

Address: Do. POX 13958, AUBUQUERQUE N. 14. 87192

16. E. Mc Corble Signature

Title: FACILITY & GITE OPERATIONS HANAGER HARDNEZ DEVELOPHENT CORP.

Address: PO. BOX 139.58 ALBUQUERQUE N. M.

I hereby swear or affirm that the information herein provided is true, complete and correct.

Date: 1/-19-91

\* NOTE: A CHANGE IN OWNERSHIP AND COMPANY NAME ONLY. NO CHANGES IN THE GTATUS OF EITHER THE HINE OR HILL SITES OR FACILITIES. SITE AND FACILITY PERSONNEL ALSO REHAIN UNCHANCED.



STATE OF NEW MEXICO 22 23 24 25.
Energy, Minerals and
Natural Resources Department

FFD 10-

FEB 1992

Received
Mining & Minerals
Division

NUAL REPORT

Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5923 FAX No.: (505) 827-7195

DO NOT WRITE IN THIS SPACE

URANIUM MILLING OPERATIONS

An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before February 15 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 19-11.

Nama	of Co	npany: MARQUEZ DEVELOPHENT CORD.
Addre	ess. D	O. MOX 13958 ALBUQUERQUE, N.M. 87192
		MRIQUEZ HILL MSHA NUMER: 2901597
Locat	tion: C	ounty Sec 34 Township 13N Range 4 W
Direc	tions to	Location if Unsurveyed:
Name	of Per	son in Charge: K.E. HC CORKLE
Title:	FAC 1	LITY & SITE OPERATIONS MANAGER Telephone: 505-247-9008
		O. BOX 13958
	14	LBUQUEROUE, N.M. 87192
1.	Was	there a change in mill name, owner or operating company during the reporting year?
	Λ.	
	X	Yes No If yes, give date of change: 11/18/91
		(month/ day / year)
_		e of Change: OWNEPSHIP
2.	lfas	subsidiary of another company, provide the following information:
		on in land Tolding Lichtwice Co
	Name	e of Parent Company: LONG ISLAND LIGHTING CO ess: 175 GAST OLD CONTEY ROAD HICKSVILLE, W.V. 11801
_		
3.	1 ype	of Operation: Conventional Insitu Leach
		Insitu Leach Rated Production Capacity: Gallons/minute
	a.	Average Utilized Capacity: Gallons/minute G
	b.	Conventional Mill Rated Capacity: Tons/day 2200
	0.	Average Utilized Capacity: Tons/day
	c.	Do you custom mill? Yes No X
	٠.	If yes, what quantity (Lbs.) of total recovery was custom milled? No ke
		HILL DID NOT OPERATE IN 1991
4.	Mine	Employment Information
	a.	Average number of direct employees:
	b.	Average number of direct employees: 4  Number of days of operation: 260- DREVENTIVE HAINTENANCE ONLY - HILL IS
	c.	Total yearly payroll: \$ SOK
	d.	Average number of contract employees, haulers, etc. 9 = (CONTRACT SECRITY)
5.	Desci	ription and Value of Improvements Made During Year
	a.	Power Plant
		<u> </u>
	b.	New Structure(s)
		<u> </u>

c.	Existing Structure(s)	V	\$	(-	う
d.	Equipment		\$		9
e.	Other (specify)		*_ \$	$-\epsilon$	<u>ー</u> う
Prod	uction Recovery and U-1		TOTAL:	s	(24)

8. Voluntary Information: Voluntary responses to the following questions would be helpful to the Department. Any other additional information would be appreciated.

Delivery contracts:

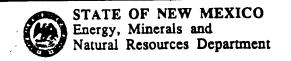
6.

- a. <u>Domestic Utilities</u> NONE
- b. Foreign Utilities NONE

I hereby swear or affirm that the information herein provided is true, complete and correct.
J.E. Mc-Corple
Signature
K.E. HC COPKLE  Name (please print)
Title: FACILITY & SITE OPERATIONS HANDERESE
Address: P.C. Box 13958 ALBEQUERUE, N.M. 87192
Date: 2/19/92

MINE/MILL/SMEL DER RESTRATION

		LISME R	LATI	ON	
Name of Mine/Mill	Smelter: MARCOL	JEZ MIN	\$ XARO	WEZ MILL	
	BOKUM RES			elephone: 505 - 247-	9008
	× 13958	ALBOROLER	US 1/20/10.	4. 87192	
	Operator (if applicable		rento,		<del></del>
			Sec. 36 To	ownship 13N Range _	5W
Directions to Location	on if Unsurveyed:	VIA			<del></del>
USGS Quadrangle N	Map Name:				
	29015	77		-	
Type of Operation:	(please check)			Men lid	ja se
MINE:	Surface	Adit In Situ Leach	Other	(describe)	*
	MillX	Smelter	A Property of the Contract of	Leach	
Mineral or Commod	ity Produced: MINE	PRODUCED FR	VEVER BE	EN COMPLETED -	AT THE
Mineral Estate Own	er: Name <u>Pok</u> Address P. c	SON RESOURCE	BUDGEROU		
Surface Estate Own	Address D.C	SUM RESOURCE D. BOX 13958- Hone 505-24	ALBUQUER	o . GUE <i>, W.H. 871</i> 9 :	2
Mineral Estate Class	sification: (Please ch	eck)			
State	Federal	Indian	Private <u>X</u>		
	r affirm that the incrue, complete and con	rrect.		ITE IN THIS SPACE	
Signature	•	- AAAA	istration Numl		
Title: MINE -MI Address: BOKUM P.O. BOK 1395 N.M. & 7192	resources corp	ove Titl	e: e:	Signature	-
Date: 1/2	3/9/				



### MINE/MILL/SMELTER REGISTRATION

		r		
Name of Mine/Mill Smelter:_	MARGUER F	LINE 4 F	PROPOSE FILL	
Name of Operator: Pocke	HI RECORPCES	CORP.	Telephone: <u>505-447-9</u>	<u>400</u> 5
Address: P.C. Pox	13958 ALBUD	WERGOVE	N.H. 87172	
Name of Previous Operator (	if applicable):			
Location: County // C	(NLEY 1/4-1/4.	Sec. <u>36</u>	$\geq$ Township $13N$ Range $54$	11
Directions to Location if Uns				
USGS Quadrangle Map Name				
MSHA Number: 290				
Type of Operation: (please	check)			
MINE: Surface Shaft	Adit In Situ Lead	Other	(describe)	
Mill .	X_ Smelter		Heap Leach	
Mineral Estate Owner:	Name BOKUM RES Address D.C. BOX 139 Telephone 50.5	100 RCES ( 108 ALBUY 247-9003		<u> </u>
Surface Estate Owner:	Name <u>POKUH RES</u> Address <u>P.O. MCX 120</u> Telephone <u>60.55</u>	OFREES CO	PUERQUE, N.F.1. 871	12°,
Mineral Estate Classification:	(Please check)		Mining & MECEIVEL	190
State Federal	Indian	Private	X Minora	/s
	plete and correct.		WRITE IN THIS SPACE [umber Assigned	
Date: 1-15-70				

Mt. Taylor Mine Rio Grande Resources Corp. USGS Quad: San Mateo



Original NISO: 1/18/90 (under Chevron's owners hip)

STATE OF NEW MEXICO Energy, Minerals and

Natural Resources Department

Lopy to op BMI and
Mining and Minerals Division

2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5923 FAX No.: (505) 827-7195

### NOTICE OF INTENTION TO SUSPEND OPERATIONS

00 NOT	VRITE	IN	THIS	SPACE
8B				

Name of Company:  Address:  P.O. Box II  Mine or Mill Name:  Location:  County  County  County  County  County  Mateo	SO Grande TAYLOR M LOCAL Jusurveyed:	Resource uts, n.m. 1/4-1/4 <u>E1/-1</u> m.le L	es 87020 MSHA 2 Sec. 24 001th 0	Number: -6 - Township 13 N Rang	 e8 <i>W</i>
Type of Operation (please Surface Mine Shaft			Mill Mineral Mine		
Check One: Permanent		Temporary		Suspension Da	ite <u>Jaa 1991</u>
	e Manag entries t welded	er live o the : Blose	s on shafts ed	site are fenced elosed by 7	

Signed by: Joe 1 Sister
Name (please print)
Title: Mine Manager
Address: P.O. BOX 1150  Grants um, 87020  Telephone: 287 - 7971
Toto phono.
Date Signed: $2-14-94$

Approved  By: Plus Fung	
Signature Title: Oding Dinder MMD  Date: 4/16/04	



Name of Company:

Mine or Mill Name: m + ..

Type of Operation (please check):

Surface Mine

Shaft

Check One:

Directions to Location if Unsurveyed: 1 m

Permanent

Pick . ly submitted

STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

\_\_ County Cibala

Adit Insitu FEB 5 1993

RECEIVED

AINING & MINERAL DIVISION

Mineral Mined or Milled -

Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

DO NOT WRITE IN THIS SPACE

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

#### NOTICE OF INTENTION TO SUSPEND OPERATIONS

North

Mill

Other 199 JAN Suspension Date

DESCRIPTION OF SAFEGUARDING PROCEDURES AND MATERIALS USED: (Note: Safeguarding guidelines are available upon request from MMD).

Temporary \_\_\_\_

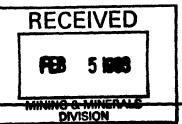
Mine Manager lives on site All entries to the Shuft dure welded closed Entire mine site is enclosed by 7' fence

Signed by: Name (please print) manager Title: Mine Address: P.O. Box 1150 87020 6 1415 Telephone: ( Date:\_

	an and	1	no.	NOT	W	ITE	IN	TH	re e	PA	<b>TF</b>	400. DA	
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D	ate:_			ger vietet	veet des.							ggardib)	A
40.00	idi wilayi ya			660.00.000		24.54		A 100 - 600			No. 2007	Michaele	



#### STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department



Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505 Telephone: (505) 827-5970 FAX No.: (505) 827-7195

#### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Sme	Her M+ TA.	ylor r	n:ne		
Name of Company	Rio Grande	Rrsou	relephone: (	1 2 8 7 -	7971
Address: P.O. B.	DY 1150	Grants	1. M 87020	)	
Manager or Person in C	harge and Title (please	nrint). Jo	E C. Lister	Mine	Manaser
Name of Previous Comp					
Lacation County C.	any (if applicable).	E 1/2 Sac	_2 Township	N Bange	x-W
Disertions to Location is	F. T. T. T. T. T. T. T. T. T. T. T. T. T.	11 1000	th of SAM	Mateo	И.М.
USGS Quadrangle Map					
			rt Up Date:		
MSHA Number:		Sta	it op Date:		
			this operation: Leach X Shaft I	n Situ Leach	
_ MILL	. <u>.</u> si	MELTER	_ Other (describe)		
Minerals or Commoditie	s Produced: Ura	ahium			
Minerals or Commoditie	s Processed:	-0-			
Status: Acti	ive Intermitten	ıt 💢 İ	nactive Under Develop	ment	
			ar)		
	Name: Rio G		Parameter		
Mineral Estate Owner:			KESONFLES		
	Address:SA				
	Telephone: ( )_Name: Rio G	SAMA	RAS ALA AL		
Surface Estate Owner:			1220000		
		4 m 1			
	Telephone:( )	54m C	<del></del>		
Mineral Estate Classific	· · · · · · · · · · · · · · · · · · ·				
_ State Indian	_ Federal X Private				
indian	X Filvate				
I hereby swear or affirm					
herein provided is true, and that all information					
released.	, ,		Title: Min Me	11545	
Loe C. J.	ist		Address: P.O. 130x	1150	
Signature		<del></del>	Cornets, 4.	m. 87	0020
JOE C. L	ister		7-1-63		
Name (please print)			Date:		



Energy, Minerals and
Natural Resources Department

XICO 25 26 27 28 29 30 3

Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505 Talanhone: (508) 827-5023

Telephone: (505) 827-5923 FAX No.: (505) 827-7195

URANIUM MINING OPERATIONS

DO	NOT	WRITE	IN	THIS	SPACE

An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before February 15 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year  $19\frac{91}{2}$ .

Name	of Company:	Rio G	rande Reso	ources Com	npany					
Addres	is:	PO	Box 1150				<del></del>			
Mine 1	Name:	Mr T	avlor Mine	•			······································	MSF	IA Number	•
Location	Name: on: County _	Cibola	1	/4-1/4	Sec	24	Townshir	13N	Range	
Directi	ons to Location	on if Unsu	rveved:	/ /			1011221			<u> </u>
Name	of Person in (	Charge:	ΤC	Ligtor						
Title:_			Mine	Manager			Telephone	:	505-287-7	971
Addres	ss:		P.O.	Box 1150			<u> </u>			
	<del></del>		Grant	s. NM 87	7020					
1.	Was there a	change in	mine name,	owner or c	perating	company	during th	е герог	ting year?	
	X	_			_		_	08	01 91	
		Yes _	·····	No If	f yes, give	date o	f change:_	/	$\frac{01}{\text{day}} / \frac{91}{\text{year}}$	
			Ownership	•			(	month/	day / year	r)
2	Nature of Ch If a subsidiar	ange:		:1- 41.	- f-11:-	- !C	4 !			
2.	II a subsidiar	y or anoun	er company,	provide the	e ionowing	g inform	iation:			
	Name of Pare	ent Compe	nu.	General A	tomics					
	Address:	ли сомра	шу	P.O. Box	85608	San Die	ego. CA	92186	-9784	
	7 Iddi 055			2 7 0 7 2011	05000,	<u> </u>	<u> </u>	22.00	3701	<del></del>
3.	Type of Oper	ation: U	Inderground Inderground	Conventional Water Reco	al overy	<u>X</u>	Surfac	Leach e Mine		
4.	Mine Employ	ment Info	rmation							
_	b. Number of the c. Total year. d. Average	er of days yearly pays ge number	of direct en of operation roll: of contract	: 365 \$ employees,	haulers, e	etc		<u>5</u> 0	ther	Total_6_
5.	Description as	nd Value	of Improvem	ents Made	During Y	ear				
	a. Power	Plant						¢	d	
	b. New S	tructure(s)						\$ \$	Ø	
	c. Existin	g Structur	e(s)					\$	Ø	
	d. Equipm	nent _						\$	Ø	
	e. Other	(specify)						\$	Ø	
	-					Т	OTAL:	\$	Ø	

6.	Percent	Production by Mineral Estate Class	sification:	4,
	Federal State		ntenn (Reservation)nn (Non-Reservation)	
7.	Product	ion, Recovery and Value During yea	ar	
	a.	Annual Production:  Ore mined (ST)  Ore milled (ST)  FOB mine value (\$)  Contained U <sub>3</sub> O <sub>8</sub> (Lbs.)	<u> </u>	
	b.	End of Year Inventory:  Ore on hand at beginning of report  Ore on hand at close of reporting y		
	c.	Depth of production (Ft):	<del>-</del>	_
	d.	Annual U <sub>3</sub> O <sub>8</sub> recovery: (Lbs.)  From ore  From mine water(stope leaching)  By insitu leach		_
	e.	Net recovery credited to this mine		
	f. g.	Unit value of recovered $U_3O_8$ : (\$/Total sales value: (\$/Lb.)	/Lb.)	
	h.	Mine water production (de-watering)	g): (GPD)	
	i.	Capacity:		
<ol> <li>8.</li> <li>9.</li> </ol>	1n + 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	usgest that State the form of ta lies. These are so asked for scleit. So	ix aid and relief from	High cedand get
	a. b.	Sales to domestic utilities: Sales to foreign utilities:		
I here	)	r or affirm that the information here	rein provided is true, complete and correct.	
	301			
	(please	= '		
Title:_	M.,	ne Manager		
Addre		1. Box 1150 mats 11.m \$7020		
Date:_	1-2	4-92		



### **Chevron Resources Company**

A Division of Chevron Industries, Inc. P.O. Box 1150, Grants, NM 87020 Phone: (505) 287-7971

January 15, 1990

Energy, Minerals and Natural Resources Dept.
Mining and Mineral Division
Marquez Building
525 Camino de los Marquez
Santa Fe, NM 87503

Attn: Mr. Tim Leftwich

Ary: / Tim /a/attach

Dear Sir:

Enclosed is the map and notification forms as required under EMNRD MMD 89-1, pertaining to placing the Mt. Taylor Mine on a standby mode for operation.

Sincerely,

J.C. Lister Mine Manager

RDP:ejs Enclosures

cc: Files



	Attack to the state of the stat		
UPDATED; 1-13-90 DRAWN BY:		SOURCES  aylor Mine	CO.
M. R. NORRIS	TITLE:	,	
DATE:	7		
5-15-89	MONTHLY	PROGR	ESS
SCALE:	1		
1" = 100'	JAN	NUARY	
APPROVED BY:	LEVEL:	DRAWING NO.:	
R. D. POWELL	3100 & 3200		

Esteral 1./54.

Mining and Minerals Division 525 Camino de los Marquez Santa Fe, NM 87503

DO NOT WRITE IN THIS SPACE						
	00	NOT	WAITI	100	THES	SPACE

8B2

# NOTICE OF INTENTION TO SUSPEND OPERATIONS

Mama	-f O-		Chev	ron Res	ources Co	mnanv	840 (m.		o Grande R			K IH
Addre	ss:		Box 1150	<u>ur</u>	ants, NM	87020	710	W MA	U GIANUETI	es our	ces co.	6/3/92
Mine	Name:_	Mt.	Taylor Mir	e				M	ISHA Number:	29-0	1375	
Locati Direct		County Location	Cibola n if Unsurv	eyed:	1/4-1/4	E <sup>1</sup> 2	Sec.	24	_ Township _	13N	Range	<u>8W</u>
Type •		ration (1 e Mine	X X	: Adit Insitu			her ineral M	fined_	Uranium			
Check	One:	Perman	ent	<del></del>	Temporar	у _	X					
DESC	RIPTI	ON OF	MATERIAI	S AND	SAFEGUA	RDING	PROC	EDUR	ES:			
		Mine w n 1/12		on stand	dby mode	on 1/15	5/90.	All p	production ac	tivit	ies wer	e
	istrat rement		d maintena	nce per	sonnel wi	11 be r	retaine	ed to	fulfill star	idby o	peratin	g
									JAM RE MINITE	2021 2 1990 CEIVED 8 Mine 8 Wine Bowsion	10 202/28 Age	
Signed		ne Man	Lik	> -		App	DO 1	NOT V	WRITE IN TH	IS SP	ACE	
		0, Box				By:			Signatu	ya.		
	Gr	ants.	NM 87020 287-7971			Title	Of the contract was been		Diguatu	• •		
Teleph	none:	(303)	201 - 1 J / I			Date	o					

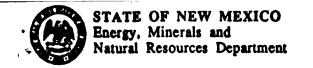
## State of New Mexico ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

MINING AND MINERALS DIVISION

### CONFIRMATION/REPORT OF TELEPHONE CONVERSATION

Name - C. Zista	PR	Name Kay Hatton
Office G. Guanco Rasmuss to	M	Office MRGS
Location Grants, NM		Location 2040 S. Pacheco, Santa Fe
Telephone Number		Telephone Number (505) 827 - 5970
	,	Taylor mine
Personal dis x & b. In	U	have guardo, broked sates;
I sin on-site."		
lanetory Remarks:		
	Office g. Grange Realmine to.  Location Grants, NM  Telephone Number 207-7971  pose of Call:  a feguarding Update - mt  Personnel do not be. It.  I live on - site."	Office g. Grange Realmers to.  Location Grants, NM  Telephone Number 287-7971  pose of Call:  a feguarding Update - mt.  Personnel de n. t. b. Italy  I live on - site, "

ATT COLUMN



DO NOT	WATE	-	***
MATERIAL SERVICE	RIGHT		100

#### CHANGE OF REGISTRATION

Each mine, mill and smelter operator in New Mexico shall notify the Mining and Minerals Division in writing prior to any suspension of operations, reactivation of operations, and any changes to the original information contained in Form 1, Mine/Mill/Smelter Registration. In the event of a change of ownership or operator, complete the reverse side of this form in addition to the information requested below.

Name of Operator:_	Chevron	Resources Compa				
Address:	P,O, Box 1	150	Grants, NM	87020		
Mine Name:	Mt. Taylor	Mine		MSHA N		29-01375
Location: County _	Cibola	1/4-1/4_E½	Sec. 24	_ Township _	13N	Range 8W
Directions to Location	on if Unsurveyed:			•		
Name of Person in	Charge: J.	C. Lister				
Title: Mine Ma	nager			Telephone:	(505)	287-7971
Address: POR	ox 1150					
Grants	NM 87020		•			

#### Please describe any changes below:

Mt. Taylor Mine ceased production on 1/12/90 and will continue on a standby mode until further notice.



Signed by:	OC Lot	
Title:	Mine Manager	_
Address:	P.O. Box 1150 Grants, NM 87020	_

1/15/90 Telephone: 505-287-7971

DO NOT WRITE IN THIS SPACE

#### CHANGE OF REGISTRATION

Each mine, mill and smelter operator in New Mexico shall notify the Mining and Minerals Division in writing prior to any suspension of operations, reactivation of operations, and any changes to the original information contained in Form 1, Mine/Mill/Smelter Registration. In the event of a change of ownership or operator, complete the reverse side of this form in addition to the information requested below.

Name of Operator:	Chevron Resources P.O. Box 1150	Company	97020		
Address:	Tavilor Mina	Grancs, Mil	67020	240174 27 1	20_01275
Mine Name: Mt.				_MSHA_Number	r: <u>29-01375</u>
Directions to Location	1/4-1/4_ n if Unsurveyed: harge: Joel C. Liste			l'ownsnip	_ Kange
Title: Mine Mine	<u>Manager, Mt. Taylor Mine</u>		Т	Celephone:(5	05) 287-7971
Address: P.O. I	Box 1150 S., NM 87020				

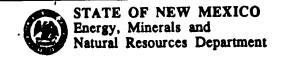
#### Please describe any changes below:

Mine closure notice was given to employees as of 11/15/89 in accordance to federal law.



Signed by:
Title: Mine Manager, Mt. Taylor Mine
Address: P.O.Box 1150 Grants, NM 87020

Date: 10/11/89 Telephone: (505) 287-7971



### MINE/MILL/SMELTER REGISTRATION

See Change of Registration for closure notice
tor closure notice
10-17-89

Name of Mine/Mill Smelter:	Mt. Taylor Mine	10-17.89
Name of Operator: Chevron	Resources Company	Telephone: (505) 287-7971
Address: P.O. Box 1150	Grants, NM 87020	rerephone.
	pplicable):	
Location: County Cibola	1/4-1/4 E ½ Sec. 2	4 Township 13N Range 8W
Directions to Location if Unsurve	eyed:	The state of the s
USGS Quadrangle Map Name:	San Mateo Quadrangle	
MSHA Number: 29-013		
Type of Operation: (please checoming the checoming that the checoming	Adit Other	
Mineral Estate Owner: Nam	Uranium Ore for U308  Chevron Resources Company  Pess P. O. Box 1150 Grants.	Cerrie .
Surface Estate Owner: Nam	Telephone (505) 287-7971  e	v NM 87020
Mineral Estate Classification: (F	Please check)	
State Federal	Indian Priva	te X
I hereby swear or affirm that herein provided is true, complete Signature  Title: Mine Manager, Mt. Ta Address: P.O. Box 1150  Grants, NM 8702	and correct.  DO NO Registration By:	T WRITE IN THIS SPACE  Number Assigned  Signature
Date: 10/11/89		

Section 10 Mine Southwest Resources (Cobb, UNC, Homestake-Sapin, Kermac) USGS Quad: Goat Mountain

Phone call with Susan Lucas Kamat Squit Co66 in 90/91 George Lotspeich 13 Sep707 some address soyrs. MSHA - Gary Williams Bed/ West Ranch Sec 32 reclamation Indian property? glotted Jones Begay lived on it cous got into it would be close for production Soction 10 doesn't fit production timetrame mid 1960s last mined by Kerr McGee ~1965 Sec 14 did mine during period ... Buckey other people own it BLM land & minerals other people staked it connected to Homestake workings ug
ortg prod by Homostake
Cobb west in Erehabilifate check 58-65,72 should be Homestake hoist /th Guilding Sec 12 we def have him includes Pysort No 2 the MSHA will of fine him lis planning on fining

what he wants is mine permit to operate wants to go underground & do exploration

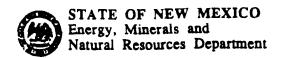
he was tres of Co that mined coopers taken over by co. out of Houston

60th 14 8 12 are dry so doubter 2005 n't go into

minimal impact New application required

new vs. existing ex. Mt Taylor under permit
since 1994
never be on now permit
be compliant under
rules
Sec 12 new minimal impact
rules

can fix vindous, can regrede no NEW construction



### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill Smelter:_ Name of Operator:Cobb Address:313 Washington					
Address: 313 Washingto	Resources Co			Telephone:	265-2622
	on S.E. Albug	uerque, NM	87108	·	
Name of Previous Operator (	if applicable): Co	bb Resourc	es Corpor	ation	
Location: County McK					14N Range 10W
Directions to Location if Uns	surveyed:		······································		
USGS Quadrangle Map Name	b:		<del></del>		
MSHA Number:					
Type of Operation: (please					
MINE: Surface Shaft	XX In S	Situ Leach	Other _	(desci	ribe)
Mill _	Sme	elter	· He	eap Leach	
Mineral or Commodity Produ	ıced: <u>U308</u>				
Surface Estate Owner:	Address		rporation		FFB 1990
Mineral Estate Classification:	(Please check)			ſ	FEB 1990
State Federal	Indi	an	Private X	X X	RECEIVED Mining & Minerals Division
I hereby swear or affirm	alean alea leefe	-• <b>:</b>		,	Mining & Minerals Division  Section 25 Section 1

Section 12 Mine Southwest Resources (Cobb, Koppen, Hydro-Nuclear, UNC, Dysart) USGS Quad: Ambrosia Lake

5

	Phone call with Susan Lucas Kamat
13 Sep707	George Lotspeich Westrood 20/91  MSHA - Gary Williams Sec// 30 me address 50 yrs.
The state of the s	MSHA - Gary Williams Sec// some address 50 yrs. ABG field office
	West Ranch Sec 32 BIA
	West Ranch Sec 32  RIA  reclamation Indian property? glotted  Tonne Begay lived on it  cous got into it
	cous got into it would be close for production
	Soction 10 doesn't fit production timeframe mid 1960s last mined by Kerr McGee ~1965
has Hand 20/90	Sec 14 did mine during period  Buckey other people own it  BLM land & minerals
	connected to Homestake workings ug orty prod by Homostake
	Sec 12  Co66 went in Erehabilifate  Check 58-65,72 should  Sec 12
	includes Pysart No2
	the MSHA will of fine him lis planning on fining

what he wants 20 mine permit to operate wants to go underground & do exploration

he was tres of Co that mined cook was taken over by co. out of Houston

60th 14 8 12 are dry so doubte 2005 n't go into

minimal impact New application required

new vs. existing ex, mt Taylor under permit
since 1994
never be on now permit
sec 12 new minimal impact
be compliant under
rules
Sec 14/Bucky existing min impact

can fix windows, can regrede no NEW construction enend 8th

#### FORM 1 MINE/MILL/SMELTER REGISTRATION

Post-It® Fax Note	7671	Date
TO SUS ON KO	Mat	From Cags
Ca/Dept. NMMM		Co. Sout
Phone # 505~47	6-3408	Phone #55
Fax #50 5-4-76-7	402	Fex # 505.

	0 1	<b>a</b>		•	•
Name of Mine/Mill/Smch	er: Section 1	7	* .		
Name of Company: So	uthwest Re	sources, LA	V-G	Telephone: (505)	1266-2500
Address: 4011 Me	sa Verde NE	Albuquera	ye NM B7	110	
Manager or Person in Cha	irge and Title (please prin	11): George Li	c tspeich	CEO	2°
Name of Previous Compa	ny (if applicable):	6 Resburce	9		
Location: County Mark	Sivley 1/4-1/4 Ser	c. 5 W Secti	on	Township_/4	N
	Range 10	W			
Directions to Location (a site may be filed with the	iraw a map). Please use e registration and suspe	the back of this for nsion forms if desir	rm. Photos and/or red.	r videos of the mine	•
USGS Quadrangle Map N	lame: Anbrosia			2 2	
MSHA Number: 29-	0.2344		Start Up Date:	7/7/07	•
	•				
MINE TYPE:	Surface	Adit	Shaft	Heap Leach	
	In Situ Leach				
	Multiple Operat	tor Pit (map of your	area of pit must he	attached)*	
	MILL	SMELTER	OTHER (descri	ihe)_	
Minerals or Commodities	Produced:_U2Og				
Minerals or Commodities	<b>y</b>				
Status:	Active X Unde	er Development	Tempora	ary Suspension	
Permar	ent Suspension				
Do you anticipate frequen	t temporary suspensions:	and reactivations of	operation?X	Yes	
No					
Capacity: (undicate cu. yd.	s. or tons, and per day, n	ionth or year)_ 2	200 tows	day	
*If you expand or move					D.
Mineral Estate Owner:	Name: Sauthu	rest Bos	OUTGES I	NC.	
<u> </u>	Address: 4011 N	Mesa Verd	L. NF AIL	u a u cray	e, NM 87110
·	Telephone: (565)_2	46-2500	, ,, ,, , , , , , , , , , , , , , , ,		,
Surface Estate Owner:	Name: Same a				
	Address:	1,			
	Telephone: ( ): )	12			
Mineral Estate Classificati	• • • • • • • • • • • • • • • • • • • •	State	Federal Indian	Private L	
	,				
I hereby swear or affirm the	nat the information herein	provided is true, co	implete and correct	, and that all	

information on this form may be released.

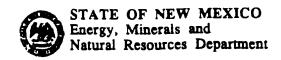
Signature Jotapetch
Signature Lotapeich
Name (please print)

Address: 4011 Mesa Verde NE Abo WA.

Batc signed: 6/14/07

Ger- 12 MINE SOLUTION RIOW Head & Sec 12 TIAN RIOW ex Sign white horse 72 Miles white Gate KerrMebee Mill you will word KerrMebee Mill 509 Being torn down Gamelas from or rancher I 40I Honestate Mill Bailroad -Grants NM Exit 79

JUN-15-2007 10:47



### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill	l Smelter: Ambro	osia Lake Sec	tion 12		
	Cobb Resourc			Telephone:_	265-2622
-	313 Washington			_	
Name of Previous	Operator (if applicable	:):Cobb_Reso	urces Corp	oration	
	McKinley				IN Range 10W
Directions to Locat	tion if Unsurveyed:				
USGS Quadrangle	Map Name:		· · · · · · · · · · · · · · · · · · ·		
MSHA Number:			<del></del>		
				·	
Type of Operation:	(please check)				
MINE:	Surface Shaft XX	Adit In Situ Leach	Other	(descri	be)
		Smelter		Heap Leach _	
				-	
Mineral or Commo	odity Produced: U-	308			
Mineral Estate Own	ner: Name Cok	ob Resources	Corporation	n	
	Address san	ne as above			
Surface Estate Owi	0.1	ob Resources			
Duriaco Estato Owi	Address_san	ne as above			601891077
	•	ohone			73450 1891077727375 73450 1891077727375
	ssification: (Please ch	·			
State	Federal	Indian	Private _	XX \	Mining & Minerals
		•			E DIVISION
I hereby swear	or affirm that the i	nformation			RECEIVED Mining & Minerals Division  ES SPACE
	true complete and co	rrect.	DO NOT	WRITE IN TE	IIS SPACE
Signature So	organic L			umber Assign	ed
Title: Preside	ent	B:	y:	Signature	
	as above				
			ate:		
- 11,10	)()				

Section 14 Mine Southwest Resources (Cobb, Hydro-Nuclear , See Tee, Holly) USGS Quad: Ambrosia Lake

***	
	Phone call with Susan Lucas Kamat
135ep707	
	MSHA - Gary Williams Sec// 30me address 50y ABG field office
	West Ranch Sec 32 BIA
	reclamation Indian property? glotted Jon it
9000	cous got into it
	would be close for production
	Soction 10 doesn't fit production timeframe mid 1960s last mined by Kerr McGee ~1965
5 thing & 9/90	Sec 14 did mine during period  Buckey other people own it  BLM land & minerals
	connected to Homestake workings up ong prod by Homostake
	Sec 12  Co66 Very n erenability for Co66 Very n erenability for Check Sg-65, 72 should
4 b	includes pysort No2
A Specific Control of the Control of	the MSHA will of fine him lis planning on fining

what he wants is mine permit to operate wants to go underground & do exploration drilling

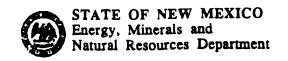
he was tres of Co that mined co60 was taken over by co. out of Houston

60th 14 8 12 are dry so doesn't go into

minimal impact New application required

new vs. existing ex. Mt Taylor under permit
since 1994
never be on now permit
sec 12 new minimal impact be compliant under
soci 4/Bucky existing min impact

can fix vindous, can regrede no NEW construction



#### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill	Smelter: Ambrosi	a Lake Sectio	n 14		
	Cobb Resource				265-2622
	Washington S.E.,				
	Operator (if applicable				
	y <u>McKinley</u>				AN Range 10W
Directions to Locati	on if Unsurveyed:				
USGS Quadrangle N	Map Name:		<del></del>		
MSHA Number:			<del></del>	<del></del>	
m ( 0	/ 1	<u></u>	<u></u>		
Type of Operation:	_	A Jin	Oshan	(4	91 N
MINE:	Surface XX	Adit In Situ Leach	Other .	(descri	ide)
	Mill	Smelter	н	eap Leach	
Mineral or Commod	lity Produced: U	308			
Mineral Estate Own	Address sam Telep er: Name Cok Address sam	ob Resources Cone as above hone  bb Resources Cone as above hone	Corporatio		
	sification: (Please ch	eck)		031-12	FEB 1991) RECEIVED Mining & Minerals
	r affirm that the in		Filvate _		Mining & Minerals Division  Sector Sector 100
herein provided is t	nt above	rect. Real By		Signature	ned





www.msha.gov



\_\_\_\_ Search MSHA

Go Advanced Options | Help

Find It! in DOL | Compliance Assistance | En Español



### **Report Selection Page**

For data other than Overview, if you do not provide a Beginning date, the date of 01/01/2004 will be used.

**Beginning Date:** 

Operator History for Mine ID: 2901744

How do I use this information? Click Here

**Begin Date** 

1/1/1979

**Ending Date:** 

**End Date** 

#### **Current Mine Information**

Mine ID:

Operator:

**Cobb Resources Corp** 

Opr. Begin Date:

1/1/1979 Section 14

Mine Name:

**Current Controller:** 

**Lotspeich George O** 

**Controller Start Date:** Mine Status:

3/9/1978

Abandoned

Status Date:

7/20/1982

Mined Material:

Uranium-Vanadium Ore

Type of Mine:

Location:

Underground

Mckinley County, NM

Address of Record:

313 Washington Se ALBUQUERQUE, NM 87108

Please select from one of the following available reports.

Overview

Inspections

Accidents\*

Violations\*\*

**VPID\*\*\*\*** 

**Operator Name** 

**Cobb Resources Corp** 

) Health Samples\*\*\*

**Get Report** 

Data only available from 1983 on for Accidents.

Data only available from 1995 on for Violations and Quartz Results.

Data only available from October 1996 on for Metal/Nonmetal Health Samples.

An Important Note

Please note that the information provided by the Data Retrieval System is based on data gathered from various MSHA systems. As there may be a lag time in data being entered into those systems, there will also be a lag in the reflection of that data on the DRS.

#### **Employment/Production Reports for This Mine**

Data only available from 1983 on for the Production Reports

Calendar Year from (yyyy):

Calendar Year to (yyyy):

2004

2007

Mine Employment and **Coal Production Totals** for This Mine

Quarterly Production Totals (®

Annual Production Totals



Return to DRS Home Page

**Back to Top** 

www.msha.gov

www.dol.gov

Frequently Asked Questions | Freedom of Information Act | Customer Survey

Accessibility | Privacy & Security Statement | Disclaimers

Phone: (202) 693-9400 Fax-on-demand: (202) 693-9401

Technical (web) questions: Webmaster
Contact Us

Mine Safety and Health Administration (MSHA) 1100 Wilson Boulevard, 21st Floor Arlington, VA 22209-3939 Section 17 Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400 FAX No.: (505) 476-3402

FORM 12: NOTICE OF INTENT TO SUSPEND OPERATIONS	For MMD use only
Name of Company: Rio Algom Mining LLC	
Address: PO Box 218, Grants, NM USA 8	7020
Name of Operation: Section 17 Mine	MSHA Number: 2900776
Location: County McKinley 1/4-1/4 Sec	Section 17 Township T14N Range R9W
Directions to Location if Unsurveyed:	
Manager or Person in Charge and Title (please print): Terry  Address: same as above  Start Up Date: 1960	- · · · · · · · · · · · · · · · · · · ·
Photos and/or videos of the mine site may be filed with this for	m if desired.
TYPE OF OPERATION: Surface Mine Adit (please check all that apply) Shaft Insitu	Mill Other Stope leaching  Mineral Mined or Milled uranium
Check One: XX Permanent Temporary  Temporary Suspension with responsible per	Suspension Date 12/31/2002 erson(s) on site at all times
COMPLETION OF SAFEGUARDING: (Note: Safeguarding All surface shafts and ventilation he secured on openings. All electrical sites is locked and fenced.	oles are safeguarded with metal barricades power sources are disconnected. Access to in accordance with the approved closeout
Signature Terry Fletcher	For MMD use only
Name (please print)	Approved Disapproved
Title: General Manager	Due
Address: PO Box 218	By: Signature
Grants, NM 87020	Title:
Telephone: ( ) 505-287-8851	Date:
Date: April 28, 2003	



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400

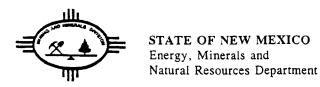
FAX No.: (505) 476-3400 FAX No.: (505) 476-3402

## FORM 11: ANNUAL REPORT OF URANIUM MINING OPERATIONS

11 Section 19 Mine Quivira Mining Co. Ar

An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

Name of Company: Rio Algom MIning LLC	
Address: PO Box 218, Grants, NM USA 87020	
Mine Name: Section 19 Miné MSHA Number: 2900776  Location: County McKinley 1/4-1/4 Sec. Section 19 Township T14N Range R9W	
Directions to Location if Unsurveyed:	
Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager  Address: Telephone: ( )  Start Up Date: 1975	
1. Was there a change in mine name, owner or operating company during the reporting year?    XX   Yes	
Nature of Change: Became a limited liabilty corporation  2. If a subsidiary of a larger company, provide the following information:	
Name of Parent Company: Rio Algom Mining LLC  Address: 6305 Waterford Blvd, Ste. 325, Oklahoma City OK 73118  Telephone:( )	
3. Type of Operation: Underground Conventional Insitu Leach  Underground Water Recovery Surface Mine  Other	
4. Mine Employment Information a. Average number of direct employees: Underground Surface 3 Other Total direct 3 (a11) b. Total number of days of operation: c. Total yearly payroll: d. Full time employees in reclamation (include in Total direct) e. Average number of contract employees, haulers, etc. (do not include in total curect):	. min
5. Description and Value of Improvements Made During Year	
a. Power Plant:	
b. New Structure(s):	
c. Existing Structure(s):	
d. Equipment:	
e. Other (specify):	
TOTAL: \$ 0	





Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

RECEIVE

## NOTICE OF INTENTION TO SUSPEND OPERATIONS

OCT U 9 1996

MINING & MINERALS DIVE or MMD use only

8 B

Name of Com	npany: Quivira Mining Co.
	PO Box 218 Grants NM 87020
	Name: Section 17 MSHA Number: 2900776
	ntyMekinley 1/4-1/4 Sec. NW?SW Section Township: 14N Range 9W
	Location if Unsurveyed:
	r videos of the mine site may be filed with this form if desired.
•	:1960
••	ation (please check):
	ace Mine Adit Mill Other
Shaft_	t X Insitu Mineral Mined or Milled Uranium
Check One:	Permanent TemporaryX Suspension Date, 9/21/93
	Temporary Suspension with responsible person(s) on site at all times
	ON OF SAFEGUARDING PROCEDURES, MATERIALS AND FINAL SLOPES, AND TIMETABLE FOR ON OF SAFEGUARDING: (Note: Safeguarding guidelines are available upon request from MMD).
	Shaft is covered with $1/2$ " steel plate welded in place. Mine si
	is fenced with barded wire fence. Vent holes are covered with
	steel plate or expanded metal welded or bolted in place. (Prior
	recalmation of the site is complete. It Refers to the Mining Act. T
$\mathcal{I}_{a}$	recalmation of the site is complete. It Refers to the Mining Act. To approve does not reflect approved of requirements under the Mining Security provided 24 hr. at Mill site and general office locations.
Signature (	For MMD use only
	Terry I Fletcher
Name (please	print) Approved Disapproved
Title:	General Manager
Address:	PO Box 218 Grants NM 8702 By:
	Title: Divisin Director
Telephone:(	505 287 8851 Date: 10/21/96
Date signed:	10/7/96

## SECTION 17

### **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

Certified Mail
Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505

June 21, 1994

JUN 73.1994

Resources

Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

I have also attached a June 9, 1993, letter from Mr. Art Gebeau to Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. In January 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all responsibility for the reclamation and management of the Church Rock mines. As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

I apologize for the delay in providing this information. As I stated to you in our telephone conversation, much of our resources have been committed to participating in the Mining and Mineral Division proposals to establish hard rock mine regulations in New Mexico. If I can be of further assistance or you need additional information, please contact me at (505) 287-8851, extension 200.

Levy I felliker

Terry Fletcher General Manager

Attachments: As stated

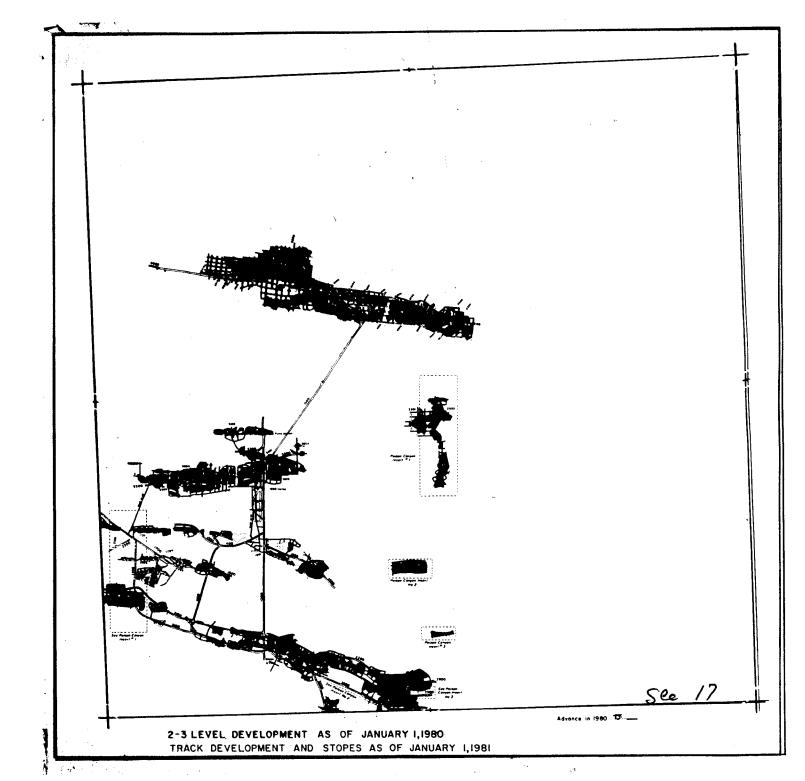
xc: B. Ferdinand (RAMC)

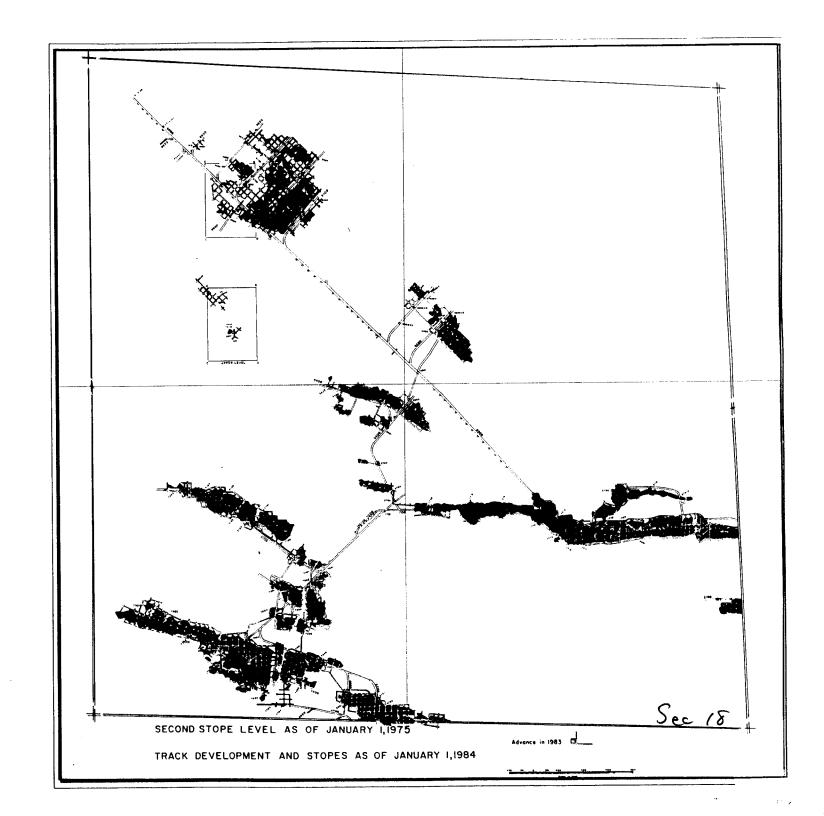
M. Freeman (RAMC)

P. Luthiger (Quivira)

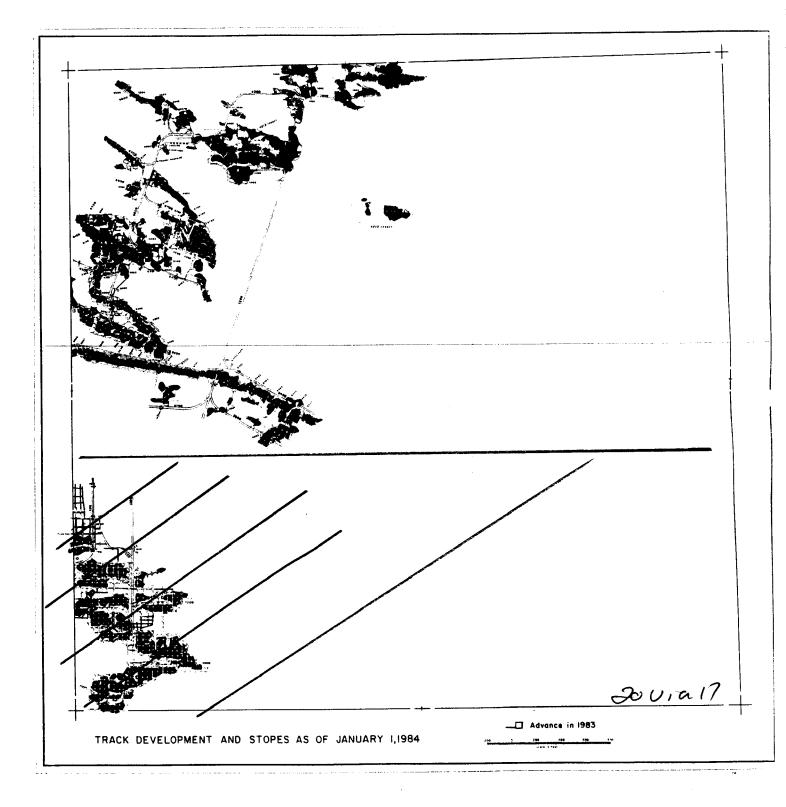
R. Smith (Kerr Mc Gee)

file





Section 20



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### STATE OF NEW MEXICO

## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

### SAFEGUARDING INSPECTION CHECKLIST

Mine/Company: Sec. 17/Q WWWA	≺
Company phone: $287 - 88 - 51$	3'
Date of inspection: $S/27/93$	
Name of inspector: KSH	$\Theta$
Others present: and a wheave	1.
Location of mine (legal description or directions to site): SW/MI	W 17/14N/9W
Check all the following that apply:	
Shaft: Adit: Pit: Quarry: Mill: Highw	all(s):
Pond: Other: (Describe):	
Commodities produced: Ur	
Safeguarding methods used: (describe all that apply) Slope of pit walls or tailings: Gentle Glope Guardrails, fencing, berms or other at highwalls: Fencing around property: (types, locks, etc.) Warning signs: Backfilling of shafts, adits, and auger boreholes: (how far into continuous)	
Personnel on site: Guards: Temporary closure methods used: (if mine is temporarily suspende Openings sealed with steel reinforced concrete or masonry wall: Shafts sealed with steel reinforced concrete slab or cable net clo Wire fence:  Barbed wire (4 strands): Cable closure: Heavy rope closure:	ed)
Support posts painted fluorescent color: Other: Beginning priority classification: Ending priority classification (to date): O-still pumping u Follow up action needed for operator to perform: Med NIS	intermittently. (MWR)
Follow up action needed for operator to perform: $\gamma \in \mathcal{N} \cup \mathcal{N} \cap \mathcal{N} \cup \mathcal{N} \cap \mathcal{N} \cup \mathcal{N} \cap \mathcal{N} \cup \mathcal{N} \cap \mathcal{N} \cup \mathcal{N} \cap \mathcal{N} \cup N$	3 Pulmotted.
Other comments: Lee photo #9	
Signature of inspector: Kithalim	
Title:	CHECK LIST
Agency:	NISO date:
Address:	ROS date:
	Торо:
Review by MMD Director: Date: Initials:	Reports:





#### STATE OF NEW MEXICO Energy, Minerals and

Natural Resources Department

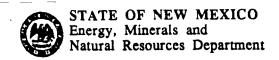


Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

#### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Smelte	er: <u>Section 17 Mine</u>	<u> </u>		
Name of Company: Quivira Mining Company Telephone: (505) 287-8851				37-8851
Address: Box 218,	, Grants, NM 87020	)		
Manager or Person in Cha	arge and Title (please print): _	Arthur E.	Gebeau, General	Manager
	ny (if applicable):			
Location: County McKit	nley 1/4-1/4 NW/SW	_ Sec	Township <u>14N</u>	Range 9W
Directions to Location if I	Unsurveyed:			
	ame:			
MSHA Number: 2900	0541	Start Up Date	1960	
MINE TYPE: MILL	<del></del>	Heap Leach	XXShaft In Situ	
	Produced: <u>Uranium</u>			
	Processed:			
Status: Active	<u>X</u> Intermittent	Inactive	Under Development	
Capacity: (indicate cu.yds	s. or tons, and per day, month	or year)	TPD at peak	· · · · · · · · · · · · · · · · · · ·
	Name: Quivira Minir		020	
	Address: Box 218, Gran			
	Telephone: (505 ) 287-88			
	Name: <u>(same)</u>			
	Address: <u>(same)</u>	<del></del>		
7	Telephone:( ) (same)			
Mineral Estate Classificati State Indian	_ Federal			
I hereby swear or affirm t	that the information			
herein provided is true, co	omplete and correct,			<b></b>
and that all information of	n this form may be	Title: _	General Mana	ger
released.		ricie: _		
J. Williams	<u></u>	Addres	s: <u>(as above)</u>	
Signature				
Arthur E. Gebe	au	Date: _	February 10,	1993



#### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mith Sometror: Section 17 Mi	ne
Name of Operator: Quivira Mining Company	Telephone: 287-8851
Address: P.O. Box 218, Grants, New Mex	cico 87020
Name of Previous Operator (if applicable):	
Location: County McKinley	1/4-1/4 <u>SW/NW</u> Sec. <u>17</u> Township <u>14N</u> Range <u>9W</u>
Directions to Location if Unsurveyed:	
USGS Quadrangle Map Name: Ambrosia L	ake
MSHA Number: 2900541	
Mill Sme	elter Heap care
Mineral or Commodity Produced: Uranium	
Address P.O. E	ra Mining Company Box 218, Grants, NM 87020 287-8851
Address P.O.	ra Mining Company Box 218, Grants, NM 87020 287-8851
Mineral Estate Classification: (Please check)	
State Federal Indi	an PrivateX
I hereby swear or affirm that the information provided is true, complete and correct.  Signature  Title: General Manager  Address: P.O. Box 218	Registration Number Assigned By: Signature
Grants, NM 87020  Date: 10-10-89	Title: Date:

Section 19 Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505

Telephone: (505) 476-3400 FAX No.: (505) 476-3402

FORM 12: NOTICE OF INTENT TO SUSPEND OPERATIONS	For MMD use only
Name of Company, Rio Algom Mining LLC	
Name of Company: RIO Algori Filling ELC  Address: PO Box 218, Grants, NM USA 87020	
Name of Operation: Section 19 Mine	MSHA Number: 2900776
Location: County McKinley 1/4-1/4 Sec. Section	
Directions to Location if Unsurveyed:	1 Township 12 Th Kange 179W
Manager or Person in Charge and Title (please print): Terry Flet	cher, General Manager
Address: same as above	Telephone: ( ) 505-287-8851
Start Up Date: 1975	
Photos and/or videos of the mine site may be filed with this form if de	esired.
TYPE OF OPERATION: Surface Mine Adit (please check all that apply) Shaft Insitu	Mill Other Stope leaching  Mineral Mined or Milled uranium
Check One: XX Permanent Temporary  Temporary Suspension with responsible person(s	Suspension Date 12/31/2002  on site at all times
DESCRIPTION OF SAFEGUARDING PROCEDURES, MATE COMPLETION OF SAFEGUARDING: (Note: Safeguarding guide All surface shafts and ventilation holes secured on openings. All electrical powersites is locked and fenced.  Reclamation of the site will proceed in a plan for the operation as described with:	lines are available upon request from MMD).  are safeguarded with metal barricades er sources are disconnected. Access to accordance with the approved closeout
Signature Terry Fletcher	For MMD use only
Name (please print)	Approved Disapproved
Title: General Manager	
	By:Signature
Address: PO Box 218	Signature
Grants, NM 87020	Title:
Telephone: ( ) 505-287-8851	
Telephone: ( )	Date:



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505

Telephone: (505) 476-3400 FAX No.: (505) 476-3402

#### FORM 11: ANNUAL REPORT

OF

URANIUM MINING OPERATIONS

Section 19 Mine Quivira Mining Co.



An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

Name of Company: Rio Algom MIning LLC	
Address: PO Box 218, Grants, NM USA 87020	
Mine Name: Section 19 Mine MSHA Num  Location: County McKinley 1/4-1/4 Sec. Section 19 Township T14N  Directions to Location if Unsurveyed:	
Manager or Person in Charge and Title (places print). Terry Fletcher, General Manager	
Manager of Person in Charge and True (please print).	
1. Was there a change in mine name, owner or operating company during the reporting year?    XX   Yes	
2. If a subsidiary of a larger company, provide the following information:	
Name of Parent Company: Rio Algom Mining LLC  Address: 6305 Waterford Blvd, Ste. 325, Oklahoma City OK 733  Telephone:( )	118
3. Type of Operation:  Underground Conventional  Insitu Leach  Underground Water Recovery  Other	
4. Mine Employment Information  a. Average number of direct employees: Underground Surface 3 Other  b. Total number of days of operation:  c. Total yearly payroll:  d. Full time employees in reclamation (include in Total direct)  e. Average number of contract employees, haulers, etc. (do not include in total direct):  Description and Value of Improvements Made During Year	Total direct 3 (all m  \$ \frac{100,000}{3}
a. Power Plant:	\$
b. New Structure(s):	\$
c. Existing Structure(s):	\$
d. Equipment:	\$
e. Other (specify):	\$
TOTAL	· <b>\$</b> 0

	Federal	•	Private	100%	
	State	-	Indian (Reservation) Indian (Non-Reservation)		
7.	Production, Recovery and V	'alue During year			
	a. Annual Production:				
٠.	LANCING LEAR NUMBERS V. LEV	eurs, expansion/in	nprovement, ciosures, market	s. issues, suggested Sta	ite action)
<i>.</i>					
			•		
10.	Voluntary Information:	Voluntary recoon	ses to the following questions	r would be belonist to th	e Denortment
10.	a. Sales to domestic		N/A	s would be helpful to the	с Бераниненк.
	b. Sales to foreign uti			<del>-</del> -	
I hereb	y swear or affirm that the info	rmation herein ord	ovided is true, complete and co	orrect	
-	Tem 17	ZPotal.	Data: 4	1/25/02	
Signatu		name.	Date:	7 7/3	-
	(PL Terry Flecther	EASE COMPL	ETE ALL OF THE FOLL	OWING LEGIBLY)	
Name (	please print) General Manager				
Title:_	General Manager		* - 1 Marie - 1		
Address	PO Box 218				
	ants, NM USA 870	20			
nev	E-mail:tfletch	er@ramc.net			

6.

Percent Production by Mineral Estate Classification:

# SECTION 19

### **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

June 21, 199

Certified Mail
Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505



Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

I have also attached a June 9, 1993, letter from Mr. Art Gebeau Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. In January 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on McGee. the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all responsibility for the reclamation and management of the Church Rock As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

I apologize for the delay in providing this information. As I stated to you in our telephone conversation, much of our resources have been committed to participating in the Mining and Mineral Division proposals to establish hard rock mine regulations in New Mexico. If I can be of further assistance or you need additional information, please contact me at (505) 287-8851, extension 200.

Lerry of Fellow

Terry Fletcher General Manager

Attachments: As stated

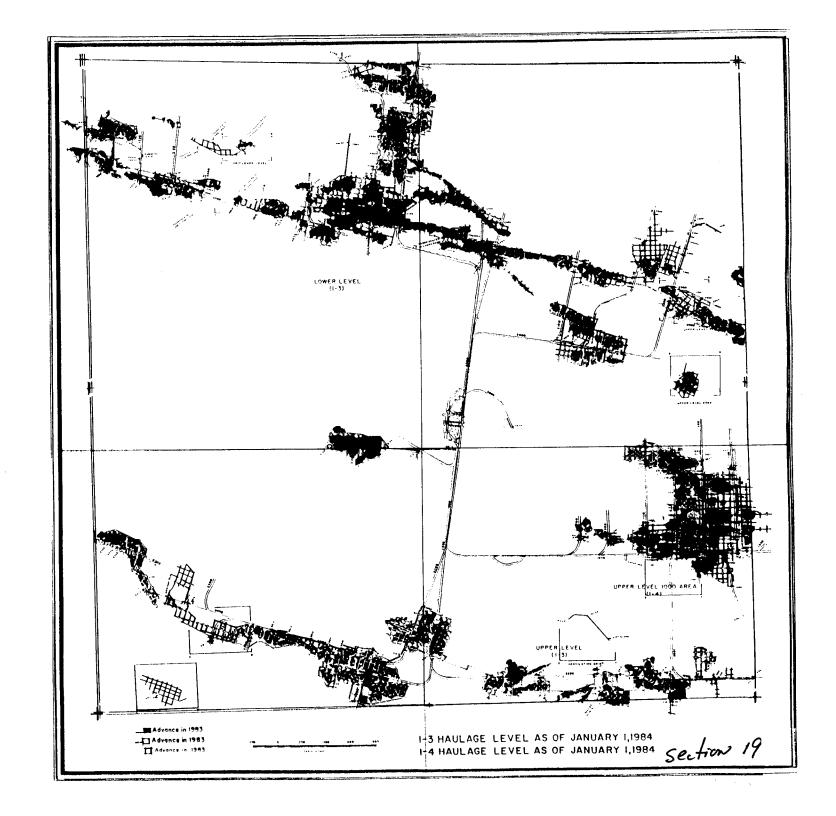
xc: B. Ferdinand (RAMC)

M. Freeman (RAMC)

P. Luthiger (Quivira)

R. Smith (Kerr Mc Gee)

file



#### STATE OF NEW MEXICO

## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

#### SAFEGUARDING INSPECTION CHECKLIST

Mine/Company: Sec, 19/ Quivra	<				
Company phone: 257 - 8851	a A A				
Date of inspection: $5/27/93$	A TOTAL TOTA				
Name of inspector: KS H	$\mathcal{O}$				
Others present: and Galean					
Location of mine (legal description or directions to site):					
Check all the following that apply:					
Shaft: Adit: Pit: Quarry:	Mill: Highwall(s):				
Pond: Other: (Describe):					
Commodities produced: Ur					
Safeguarding methods used: (describe all that a	alls: now sloping waste pile &				
Slope of pit walls or tailings:	mour a mold till has muse				
Guardrails, fencing, berms or other at highway	alls:				
Fencing around property: (types, locks, etc.)	•				
Warning signs:					
Backfilling of shafts, adits, and auger boreho	les: (how far into opening)				
	-				
Personnel on site: Guards:					
Temporary closure methods used: (if mine is te	mporarily suspended)				
Openings sealed with steel reinforced concret	e or masonry wall:				
Shafts sealed with steel reinforced concrete si	ab or cable net closure:				
Wire fence:					
Barbed wire (4 strands):					
Cable closure:					
Heavy rope closure:					
Support posts painted fluorescent color:					
Other:					
Beginning priority classification:					
Ending priority classification (to date): $\circ - \circ \circ$	tive as n WR well field.				
Follow up action needed for operator to perform	n:				
Other comments:					
2 1 1 10					
Signature of inspector: P. Hallm					
Title:	CHECK LIST				
Agency:	NISO date:				
Address:	ROS date:				
	Topo:				
Review by MMD Director: Date:	Initials: Reports:				



#### STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

RECEIVED

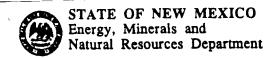
FEB 1 1 1000

Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

## MINING & MINER DIVISION MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Sme	lter: Section 19 Mi	ne					
Name of Company: Qu	ivira Mining Compa	.ny		relephone:	, 505 <u>, 28</u>	37-885	1
	. Grants. NM 8702			<u> </u>			
Manager or Person in C	harge and Title (please print):	Arthu	r E. Gel	beau, G	<u>eneral N</u>	<u>lanage</u>	r
Name of Previous Comp	pany (if applicable):			<del></del>			
Location: County MCK	<u> </u>	E Sec	19	Township _	14N	Range .	9W
Directions to Location i	f Unsurveyed:						
USGS Quadrangle Map	Name:						
MSHA Number:29	00541	Start	Up Date:	1975			
			<u> </u>				
	Industrial Classification (SIC)		-		•		
MINE TYPE:	Surface Adit	_ Heap Le	each X	Shaft	In Situ L	.each	
MILL	SMELT	ER	_ Other	(describe)			
Minerals or Commoditie	es Produced: <u>Uraniu</u>	m					
Minerals or Commoditie	s Processed:				<del></del>		
Status: Act	ve Intermittent	Inac	tive	Under De	velopment		
	ds. or tons, and per day, mo						
			· · · · · · · · · · · · · · · · · · ·	· · · · · ·			
Mineral Estate Owner:	Name: <u>Quivira Mi</u>	_		<u></u>			
	Address: Box 218, C	rants, l	NM 870	20		<del></del>	
	Telephone: (505) 287						
Surface Estate Owner:	Name: (Sa						
	Address:(Sa	me)					
	Telephone:( ) (Sa	me)					
Mineral Estate Classific							
_ State	Federal						
_ Indian	X Private						
I hereby swear or affirm	that the information						
herein provided is true,	complete and correct,					<b>→</b>	
and that all information	on this form may be		Tial G	eneral	Manager		
released.			Title:				
futto 3	Token_		Address: .	(as	above)		-
Signature							
Arthur E. Geh Name (please print)	eau		Date: F	ebruarv	10. 199	93	
· · · · · · · · · · · · · · · · · · ·							



#### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mikkx	Smeller: Section	19 Mine			
Name of Operator:_	Quivira Mining Co	ompany		Telephone:287	-8851
Address: P.O. B	ox 218, Grants, Ne	ew Mexico 8702	0		
Name of Previous O	perator (if applicable)	):		<del></del>	
Location: County	McKinley	1/4-1/4 <u>SE/N</u>	W Sec. 19	Township 14N	Range 9W
Directions to Location	on if Unsurveyed:			(1917)	•>
USGS Quadrangle M	Iap Name: Ambros	sia Lake		18	<b>Q</b>
	2900541			OCT 16 190	89
Type of Operation:				A KELLEIVI	
MINE:	Surface	Adit In Situ Leach _	Other	(describe)	10
	Mill	Smelter	I	Heap Leach	<del></del>
Mineral or Commod	ity Produced: Una	anium			
Mineral Estate Owne	AddressP	uivira Mining ( .O. Box 218, Gr hone 287-8851	ants, NM 87	7020	
Surface Estate Owne	Address_P	uivira Mining ( .O. Box 218. G hone 287-8851	ants, NM 8		
Mineral Estate Class	ification: (Please ch	eck)			
State	Federal	Indian	_ Private	X	
Signature  Title: Genera	affirm that the incree, complete and conditions of the second condition	rrect.		WRITE IN THIS umber Assigned_ Signature	SPACE
Grants		0000000000	itle: ate:		
Date: 10-10-	89				

Section 22 Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Goat Mountain



April 28, 2003

Date:\_

#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505

Telephone: (505) 476-3400 FAX No.: (505) 476-3402

FORM 12: NOTICE OF INT TO SUSPEND OPERATIO		For MMD use only
Name of Company: Rio Algom Mining	LLC	
Address: PO Box 218, Grants, NM	USA 87020	
Name of Operation: McKinley		MSHA Number: 2900776
Location: County McKinley 1/4-1/4 Sec	-	Township T14N Range R10W
Directions to Location if Unsurveyed:		
Manager or Person in Charge and Title (please print): same as above		
Address: Start Up Date: 1960		Telephone: ( ) 505-287-8851
Start Up Date. 1700		
Photos and/or videos of the mine site may be filed w	vith this form if desired.	
TYPE OF OPERATION: Surface Mine [please check all that apply] Shaft	Adit Mill Insitu Mineral Mine	Other Stope leaching ed or Milled uranium
	emporary Suspension sponsible person(s) on site at all	n Date 12/31/2002
	afeguarding guidelines are avaitation holes are safe ctrical power source proceed in accordance cribed within mine parts.	<pre>ilable upon request from MMD). eguarded with metal barricades es are disconnected. Access to ce with the approved closeout</pre>
Signature 7 Million		For MMD use only
Terry Fletcher		
Name (please print)	Approv	ved Disapproved
Title: General Manager		
Address: PO Box 218	By:	Signature
Grants, NM 87020	Title:	
Telephone: ( ) 505-287-8851	Data	



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505

Telephone: (505) 476-3400 FAX No.: (505) 476-3402

#### FORM 11: ANNUAL REPORT

OF URANIUM MINING OPERATIONS

11 Section 22 Mine Quivira Mining Co.



An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

Name of Company: Rio Algom Mining LLC	
Address: PO Box 218, Grants, NM USA 87020	
Mine Name: Section 22 Mine MSHA Numb Location: County McKinley 1/4-1/4 Sec. Section 22 Township T14N Directions to Location if Unsurveyed:	per: 2900776 Range R10W
Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charge and Terry Fletcher, General Manager or Person in Charg	ınager
1. Was there a change in mine name, owner or operating company during the reporting year?  [XX] Yes  No If yes, give date of change: 2 / 12 / 02 (month / day / year)	
Nature of Change: <u>Became a limited liability corporation</u> 2. If a subsidiary of a larger company, provide the following information:  Name of Parent Company: Rio Algom Mining LLC  Address: 6305 Waterford Blvd., Ste. 325, Oklahoma City, OK 73118  Telephone:( )	
3. Type of Operation: Underground Conventional Insitu Leach  XX Underground Water Recovery Surface Mine  Other	
4. Mine Employment Information a. Average number of direct employees: Underground Surface 3 Other b. Total number of days of operation: c. Total yearly payroll: d. Full time employees in reclamation (include in Total direct) e. Average number of contract employees, haulers, etc. (do not include in total direct):	Total direct 3  \$
<ul><li>Description and Value of Improvements Made During Year</li><li>a. Power Plant:</li></ul>	S
b. New Structure(s):	\$
c. Existing Structure(s):	\$
d. Equipment:	\$
e. Other (specify):	\$
TOTAL:	\$ 0

6.	Per	cent Production by Mineral Estate Classification:		
	Fed	leral Private	100%	
	Sta	te Indian (Reservation)		
		Indian (Non-Reservation)		
7.	Pro	duction, Recovery and Value During year		
	a.	Annual Production:		
		Ore mined (ST) Ore milled (ST)		
		FOB mine value (\$)		
		Contained U <sub>3</sub> O <sub>8</sub> (Lbs.)		
	b.	End of Year Inventory:		
		Ore on hand at beginning of reporting year (ST)  Ore on hand at close of reporting year (ST)		
	c.	Depth of production (ft.):		
	đ.	Annual U <sub>3</sub> O <sub>8</sub> recovery (Lbs.):		
		From ore	0	
		From mine water (stope leaching)  From insitu leach	9	
	e.	Net recovery credited to this mine (Lbs. U <sub>3</sub> O <sub>8</sub> ):		
	f.	Unit value of recovered U <sub>3</sub> O <sub>8</sub> (\$/Lb.):		
	g.	Total sales value (\$/Lb.):	0	
	h. i.	Mine water production (de-watering) (GPD):  Capacity:	0	
	1.	• •		
8.	Siz		creage Disturbed to Date: 35	
		Ad	creage Reclaimed to Date: 15.8	
		closed shaft and three vent holes per appr these areas.	roved closeout plan and revegetated	! —
10.	Vo a.	luntary Information: Voluntary responses to the following questio  Sales to domestic utilities: N/A	ons would be helpful to the Department.	
	b.	Sales to foreign utilities		
I herel	by sw	ear or affirm that the information herein provided is true, complete and	d correct.	
	_	1200	4/25/03	
<u> </u>	-	erry I Tleleker. Date:	7/25/03	
Signa	ture	(PLEASE COMPLETE ALL OF THE FOL	LOWING LEGIBLY)	
	Te	cry Flecther	LEOWING LEGIBET)	
Name		se print)		
	. (	General Manager		
Title:		PO Box 218		
Addre				
Gr	ants	s, NM USA 87020		
Ine	wZ	tfletcher@ramc.net		

# SECTION 22

## **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 • GRANTS, NEW MEXICO 87020

June 21, 199

Certified Mail Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505



Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

I have also attached a June 9, 1993, letter from Mr. Art Gebeau Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. In January 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on McGee. the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all responsibility for the reclamation and management of the Church Rock As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

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Lerry I fellower

Terry Fletcher General Manager

Attachments: As stated

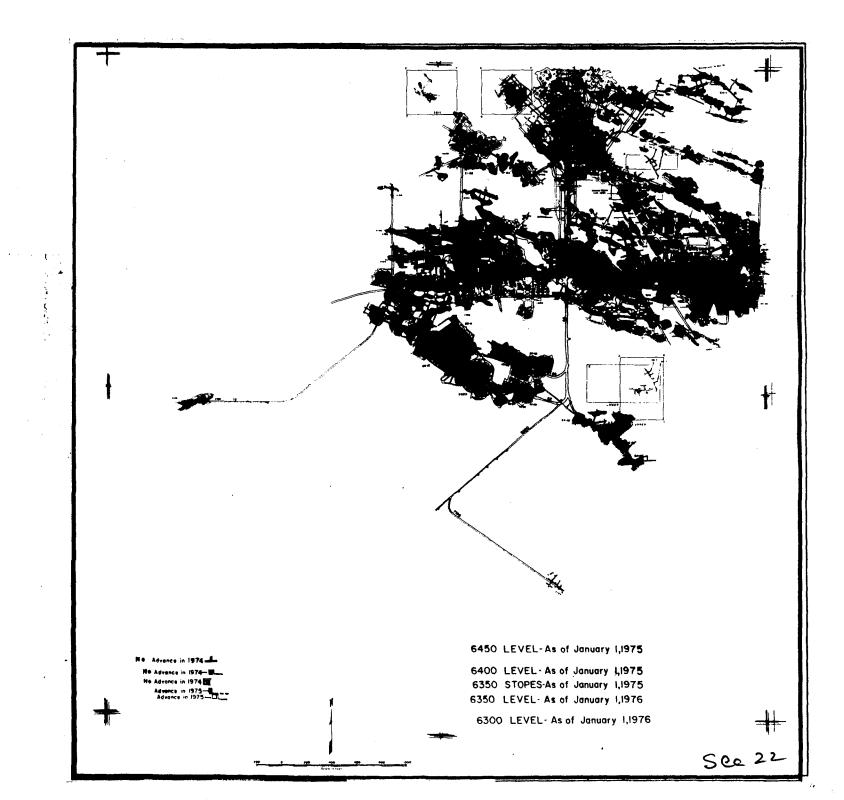
xc: B. Ferdinand (RAMC)

M. Freeman (RAMC)

P. Luthiger (Quivira)

R. Smith (Kerr Mc Gee)

file





STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department APR 2 1993

Mining and Minerals L.

2040 South Pacheco Street
Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

William G. I. Mindhals Division

## NOTICE OF INTENTION TO SUSPEND OPERATIONS

DO NOT WRITE	IN THIS SPACE
8B	

Address: P. Mine or Mill Na Location:	me: Section County.	Grants 22 Mine McKinle	, NM 8/UZU	22 Township 14N Range 10W
	1960			
• •	on (please check): Mine	Adit Insitu .	Mill Mineral Mined (	Other or MilledUranium
Check One:	Permanent		Temporary X	Suspension Date mid-1991

DESCRIPTION OF SAFEGUARDING PROCEDURES AND MATERIALS USED: (Note: Safeguarding guidelines are available upon request from MMD).

- 1. Shaft collar is covered with a heavy steel plate welded to support beams.
- Ventilation holes are covered with steel plates welded or bolted to the top flange of the steel casing.
- 3. Mine buildings, equipment and materials have been removed except for those to be used in conjunction with leaching.

Signed by: Att & Seben
Name (please print) Arthur E. Gebeau Title: General Manager
Address: P.O. Box 218, Grants New Mexico 87020
Telephone: (505) <u>287-8851 ext 200</u> Date: April 1, 1993

With the Allesia	TO STOM HOUSEN THE WITE	G GD 4 G73
	DO NOT WRITE IN THE	S SPACE
	. UD1/	
Approved	<u>ujeze</u>	
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		2
660 60 60 60 60 60 60	1/16/201	7 )
Bv: 🔾	KOVA BAIL	asa 1
<i></i>	1 July Confe	
0000	Signature	<i>)</i>
Title:	AULOCHA	
State with the state	19:11	**************************************
Date:	14-5-195	

### STATE OF NEW MEXICO

## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

#### SAFEGUARDING INSPECTION CHECKLIST

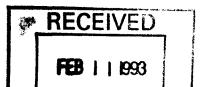
Mine/Company: Lec. 22/Qwww.a		▼						
Company phone: 287 - 885/		~~~~~~ '						
Date of inspection: 5/27/93	·	COULD STATE OF THE						
Name of inspector: $\ltimes S H$		90						
Others present: and Geblan								
Company phone: 287-885/ Date of inspection: 5/27/93  Name of inspector: \( \times \text{H} \)  Others present: \( \times \text{H} \)  Location of mine (legal description or directions to site): \( Ntd / NE / 22 / 14N / 10W \)  Check all the following that apply:  Shaft: \( Adit: \)  Pand: \( \text{Pit:} \)  Quarry: \( \text{Mill:} \)  Highwall(s): \( \text{Highwall(s):} \)								
Pond: Other: (Describe):								
Commodities produced: ()								
Safeguarding methods used: (describe all that ap	oply)							
Slope of pit walls or tailings:								
Guardrails, fencing, berms or other at highway	alls:							
Fencing around property: (types, locks, etc.)								
Warning signs:								
Backfilling of shafts, adits, and auger boreho	les: (how far into	o opening)						
Personnel on site: Guards:								
Temporary closure methods used: (if mine is te	— mporarily suspen	ded)						
Onanings social with stack rainforced concret		11.						
Shafts sealed with steel reinforced concrete si	lab or cable net c	closure: Shalt collar covered						
Shafts sealed with steel reinforced concrete shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealed with sealers shafts sealers shafts sealers shafts sealers shafts sealers shafts shafts sealers shafts shaf	what to hiply	seart Journe vent, miles an						
Barbed wire (4 strands): W - July plate -	botted down.	Land continued & covered so						
Cable closure: <70 micro R	/ Mr. Nime a	domession the are drawing						
Cable closure: <70 micro R. Heavy rope closure: <20 micro R. W.	& Ani NAMO Like	Micord.						
Support posts painted fluorescent color:		V Messell .						
Other:								
Beginning priority classification: 815								
Ending priority classification (to date):/								
Follow up action needed for operator to perform	n:							
· · · · · · · · · · · · · · · · · · ·								
Other comments:								
Signature of inspector: KHATM								
Title:		CHECK LIST						
Agency:		NISO date: $4/1/93$						
Address:		DOS datas						
		Topo: Goat mtn.						
Review by MMD Director: Date:	Initials:	Reports:						
	·							



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## STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department

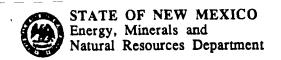


MINING & MINERALS DIVISION Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Smelte	Section 22 1	line			
			Talanharas ( 5)	05) 287-8851	
<del>-</del> -	, Grants, NM 87		relephone: ( 5		
			F Cebean Ce	neral Manager	
				iciai nanagei	
	y (if applicable):			v - 10W	
•			=	N Range 10W	
	Insurveyed:				
USGS Quadrangle Map Na	me:		7050	, <u></u>	
MSHA Number: 290	00541	Start Up	Date: 1958		
	Surface Adit	_ Heap Leach	X Shaft	In Situ Leach	
Minerals or Commodities	Produced: <u>Uraniw</u>	n		·	
Minerals or Commodities	Processed:				
Status: Active	Intermittent	X Inactive	Under Develo	pment	
	or tons, and per day, mo				
	<u> </u>	<u> </u>			
Mineral Estate Owner: N	lame: <u>Ouivira Mi</u>	ning Compa	ny		
A	Address: Box 218. G	rants. NM	87020		
T	elephone: (505 ) 287	-8851			
Surface Estate Owner: N	lame:(sam	e)			
A	Address: (sam	e)			
. Т	elephone:( ) (sam	e)			
Mineral Estate Classification State Indian	_ Federal				
I hereby swear or affirm therein provided is true, contained that all information on released.	mplete and correct,		le: <u>General Ma</u> dress: <u>(as ab</u> o	.:	
Signature		A	February l		
Arthur F. Gebe Name (please print)	au	— Da	te:		



## MINE/MILL/SMELTER REGISTRATION

Name of Mine/MAIN SAXANCH: Se	ection 22 Mine		
Name of Operator: Quivira Mini	Telephone: 287-8851		
Address: P.O. Box 218, Grant	s, New Mexico 87020	)	
Name of Previous Operator (if appl	icable):		·
Location: County McKinley	1/4-1/4 <u>NE/N</u>	W Sec. 22 Township 14N Range	10W_
Directions to Location if Unsurveye			
USGS Quadrangle Map Name:		. 8118	
MSHA Number: 2900541	- · · · · · · · · · · · · · · · · · · ·	<b>S</b>	
Type of Operation: (please check)		A KECETYEU E	
	Adit	Other (describe)	
Mill	Smelter	Heap Leach	
Mineral or Commodity Produced:	Uranium		
Mineral Estate Owner: Name_Addres	Quivira Mining C s P.O. Box 218, Gr Telephone 287-8851	rants, NM 87020	
	Quivira Mining C s P.O. Box 218, Gr Telephone 287-8851	rants, NM 87020	<del></del>
Mineral Estate Classification: (Plea	ase check)		
State Federal	Indian	Private X	
I hereby swear or affirm that herein provided is true, complete a	the information and correct.		
S.S. Mutacul	2	DO NOT WRITE IN THIS SPACE	
Signature	Ke	gistration Number Assigned	
Title: General Manager Address: P.O. Box 218 Grants, NM 87020	Tie	Signature tle:ate:	
Date: 10-10-89			

Section 23 Mine Homestake (UNC-Homestake, Homestake-Sapin) USGS Quad: Ambrosia Lake

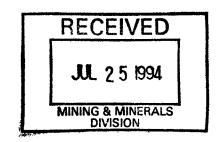
ij

ent

### **HOMESTAKE MINING COMPANY**

P.O. BOX 98 GRANTS, NEW MEXICO 87020 (505) 287-4456

July 22, 1994



State of New Mexico
Energy, Minerals and
Natural Resources Department
Mining and Minerals Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Attn.: Kay Hatton

Re: Mine Workings Maps For Sections 23 and 25 Mines

Dear Ms. Hatton:

As per your request attached are two mine working maps, one for Section 23 T14N, R10W and one for Section 25 T14N, R10W. These maps are the most up-to-date maps of the mine workings.

Should you have any other questions please contact me at the Grants office.

Sincerely,

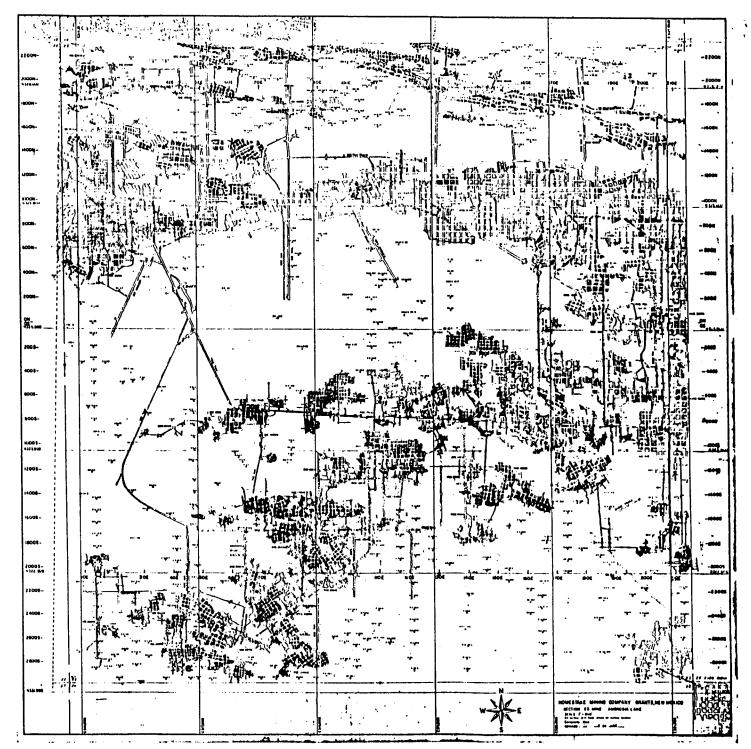
HOMESTAKE MINING COMPANY

F. R. Craft

Resident Manager

FRC:jg

Attachments (2)



Note: Section corners are highlighted

MK

## STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
MINING AND MINERALS DIVISION
MINE REGISTRATION AND GEOLOGICAL SERVICES

#### SAFEGUARDING INSPECTION CHECKLIST

Ning/Comments	Ro	_
Mine/Company: Dec. 23/ Nomesta Company phone: 287-4456	,	120
Data of increations 5/2 1/37		A A
Date of inspection: 5/27/93 Name of inspector: KSH		U U
Others present: and Gallan		
Leasting of mine Appal description or direction	a to aitaly and a	11 0 /10 W
Location of mine (legal description or direction	s to site): 23//	977 / 700
Check all the following that apply:	Mills Itiahaa	-11/-).
Shaft: Adit: Pit: Quarry: Pond: Other: (Describe):	MIII: Highw	an(s):
Commodities produced: ()	1N	
Safeguarding methods used: (describe all that a	ppiy)	
Slope of pit walls or tailings:	11	
Guardrails, fencing, berms or other at highw		
Fencing around property: (types, locks, etc.)		
Warning signs:		
Backfilling of shafts, adits, and auger boreho    Walth   Well   Well	ples: (how far into c	opening) Thatto a went hel
machilla w. earth trempriced	inclu apon	notalled, Surface structions
Personnel on site: Guards:		manicantituded & mine
	F =	
Openings sealed with steel reinforced concre		
Shafts sealed with steel reinforced concrete s	slab or cable net clo	sure:
Wire fence:	•	
Barbed wire (4 strands):		
Cable closure:		
Heavy rope closure:		
Support posts painted fluorescent color:		
Other:		
Beginning priority classification: 66		
Ending priority classification (to date): / C		
Follow up action needed for operator to perform	m:	
Other comments:		
a. b. h.		
Signature of inspector: K, Hall		CTTP CTT T TOTAL
Title:		CHECK LIST
Agency:		NISO date: $\frac{3}{6}$ $\frac{6}{9}$ $\frac{2}{9}$
Address:		ROS date: 2/19/93
		Topo: Jm/mosia Late
Review by MMD Director: Date:	Initials:	Reports:



Mining and Minerals Division 525 Camino de los Marquez Santa Fe, NM 87503

FEB | 9 1993

RECEIVED

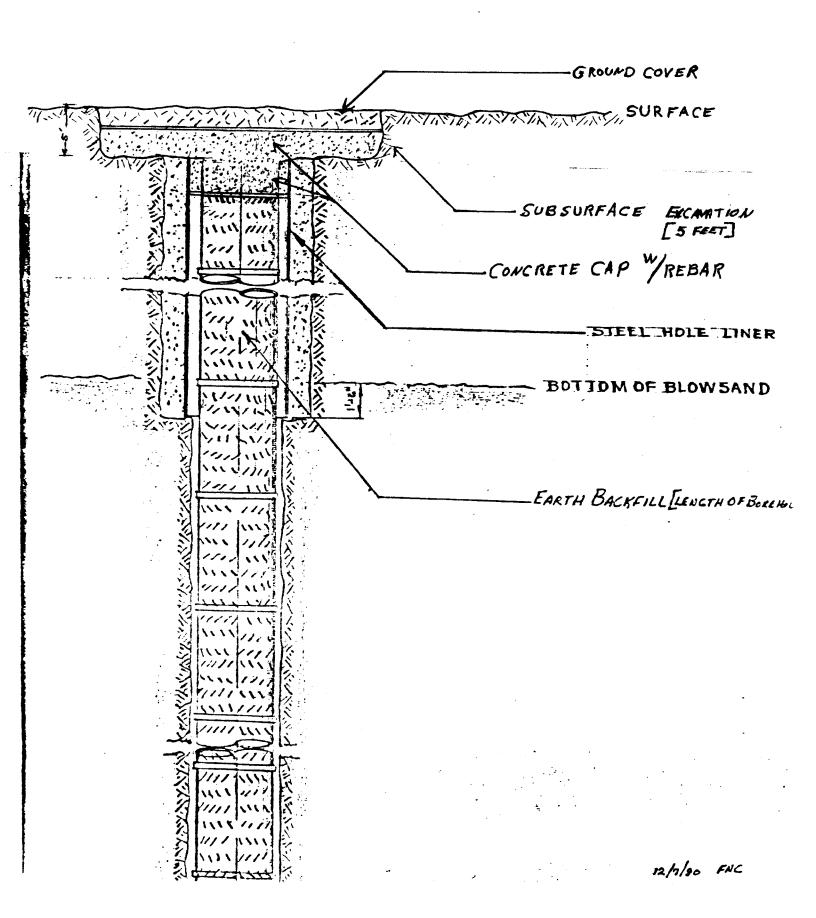
SO NOT WRITE IN THE SPACE

REPORT OF SAMERALS
DIVISION

Name of Op	erator:	]	Iomestak	e Mining	Compan	У				
Address:	P.O. Bo	эх 98								
Mine Name:		Sect	ion 23		<del> </del>		MS	SHA Number	2	900775
Location:	County	_McKinle	<del>7</del> — —	1/4-1/4	_full	Sec.	23	Township .	14N	Range 10W
Directions to	Location	if Unsurv	eyed:							
Type of Ope Surfac Shaft	eration (plee Mine _		Adit		Oth Mir		lined			
DESCRIPTI (include quar			LS AND	PROCED	URES	USED	IN C	OMPLET L.	SAFE	GUARDING:
Two shafts reinforced	and 15 concrete	ventilat e cap tha	ion bore t is lar	eholes we: ger than	re back the sh	fille aft o	d with r bore	earth and hole.	cover	red by a
See attache	ed schema	atic draw	ing of a	typical	"Shaft	or B	orehol	e Configur	ation.	"
									٠	
	······································			<del></del>						
DATE OF C	OMPLET	ION: 7-	3-92	_						
I hereby swe	ar or affii	m that the	informatio	on herein p	provided	is truc	e, comp	lete and corr	ect.	
Ž.	Mult	<i>'</i>								
	Signature									
Title: Resi	dent Man	ager		<del></del>						
Address: P.	O. Box 9	8 87020								
Date: 2-/	16-93									

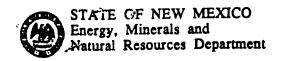
## HOMESTAKE MINING COMPANY GRANTS DIVISON

TYPICAL BOREHOLE CONFIGURATION



## HOMESTAKE MINING COMPANY GRANTS DIVISION

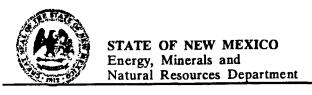
TYPICAL SHAFT CONFIGURATION -GROUND COVER -CONCRETE CAP W/REBAR -FILL DIRT TO BOTTOM OF SHAFT SECTION AA 12/1/90 FNC



NOTICE OF INTENTIONS
TO SUSPEND OPERATIONS

DO NOT WRITE IN THIS SPACE

TO SUSPENI	D QPERATIONS
597	Mining & Mined W
	Company
Name of Operator: Homestake Mining	Company
Address: P.O. Box 98, Grants, NM 8 Mine Name: Section 23 Mine	MSHA Number: 2900775
Wille Walle. Section 23 Pille	MOTIA Number. 2500775
Location: County McKinley 1/4-1/4 Directions to Location if Unsurveyed:	full Sec. 23 Township 14N Range 10W
Type of Operation (please check):  Surface Mine Adit Shaft Insitu	Other Mineral Mined
Check One: Permanent x Temporar	ry
DESCRIPTION OF MATERIALS AND SAFEGUA	ARDING PROCEDURES:
ventilation boreholes will be backfilled w	cion activities have begun. All shafts and with earth and a reinforced concrete cap will burface structures will be removed and dis-
	·
	·
•	
	•
	DO NOT WRITE IN THIS SPACE
Simulation 48/14	, ,
Signed by: Monager  Title: Resident Manager	Approved 190
	By: ATACK THATAN
Address: P.O. Box 98  Grants. NM 87020	Title: Skynature
Telephone: (505) 287-4456	Date: 2-9-92/



CPY =

Mining and Minerals Division 2040 South Pacheco Street

Santa Fe, NM 87505 Telephone: (505) 827-5923 FAX No.: (505) 827-7195

#### ANNUAL REPORT

OF -

#### URANIUM MINING OPERATIONS

WRITE	IN	THIS	SPACE
	WRITE	WRITE IN	WRITE IN THIS

are to	be received by the Mining and Minerals Division before February 15 of arate form for each operation. Data in this report covers calendar year	the following year. Please submit
Mine Locati Direct Name Title:	of Company: Homestake Mining Company ss: P.O. Box 98, Grants, NM 87020-0011  Name: Section 23 Mine on: County McKinley 1/4-1/4 full Sec. 23 Towns ions to Location if Unsurveyed:	MSHA Number: 29-00590 hip 14N Range 10W  ne: 287-4456
1.	Was there a change in mine name, owner or operating company during	the reporting year?
2.	Nature of Change:  If a subsidiary of another company, provide the following information:	
3.	Name of Parent Company:  Address:  Type of Operation: Underground Conventional Insit	u Leach
э.	Underground Water Recovery X Surf	ace Mine
4.	Mine Employment Information	NAR 1991
	Mine Employment Information  a. Average number of direct employees: Underground 1 Surface b. Number of days of operation: 100 (265 days standby) c. Total yearly payroll: \$ 197,192 d. Average number of contract employees, haulers, etc. N/A	Other RECEIVED Mining & Minerals Division
5.	Description and Value of Improvements Made During Year  a. Power Plant	SASOSEI SU TISSUS
	b. New Structure(s)	\$ N/A
	c. Existing Structure(s)	\$N/A \$N/A
	d. Equipment	\$ N/A
	e. Other (specify)	\$N/A
	TOTAL:	\$ N/A

\*Average number of employees was calculated using the sum of each month's total

and dividing that number by 12.

Form 11

u.	Linu of rear summary (Events, expansion/improvement, closures, markets, issues, suggested State action
	Ceased all mine water stope leaching on 4/10/90 and placed mine on standby st
9.	Voluntary Information: Voluntary responses to the following issues would be helpful to the Department.
	a Sales to domestic utilities:  Sales to foreign utilities:
I here	shy swear of affirm that the information herein provided is true, complete and correct.
I here	Vistorial Illar
Signa	ed Craft (please print)
Name.	(blease print)
Title:_	
Addre	SS: P.O. Box 98  Grants, NM 87020-0011
Date:_	

RΛ	MAT	WMTE	IM	TLHE	SPACE

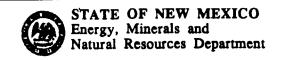
## ANNUAL REPORT

OF

#### URANIUM MINING OPERATIONS

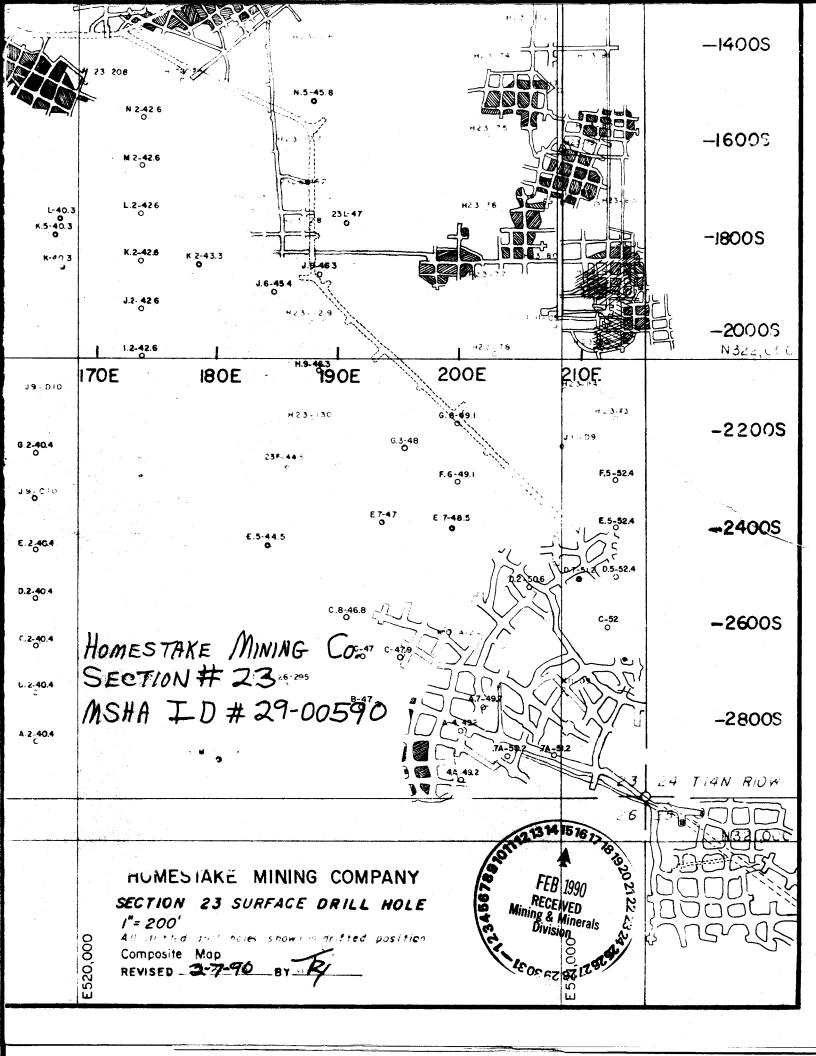
									December 31. following year	
Name	e of Ope	erator:	Homestak	e Mining	g Company	7			per: 29-00590 Range 1017	
Addr	ess:		Post Of	fice Bo	x 98, Gra	ints, NM	87020			
Mine	Name:	Sect	ion 23				MS	SHA Numb	er: 29-00590	
Loca	tion: Co	ounty Mc	Kinley	1/4-1	/4 Full	Sec. 23	Townsl	hip <u>14N</u>	Range 1007	
Direc	tions to	Location if	Unsurveyed: _							
Namo	of Pers	son in Char	ge:		F. R. (	raft	<del> </del>			
Title:			Resicent M	anager		-	Teleph	one: 287	7-4456	
Addr	ess:P	ost Office	Unsurveyed:_ ge: Resicent M							
	G	rants, IM	87020							
1.	Was th	ere a chang Yes	e in mine nan		•	_	of change:	•		
2.	Name Addres	of Parent C	another compa				10.00			
3. 4.	Type o	of Operation: Employment	Undergroun Undergroun	d Conver d Water	ntional Recovery_	X	Insitu Lea Surface M	ine Otil	14 15 16 17 18 15 N	
4.	MINE	emproyment	IIIOIIIIauoii					6	8	.\
5.	a. b. c. Descrip	Total number of Total yearly	er of employee days of operat payroll: alue of Improv	s: Under ion: ements N	\$ 883 Made Duri	4 Surface 65 975	<u>11</u> Othe	4567 Wini	FEB 1990 RECEIVED ng & Minerals Division  OE 67 87 12 51 51	13333
	a.	Power Plant					s	11/A	05 62 8216	
	b.	New Structu	re(s)					IJ/A		
							\$_	N/A		
							\$_	N/A_		
	e.	Other (speci	fy)		1 _					
		/Ib not cu	reado inidat	າດກະທາ	10		•	120 000		

	Conventional undergro	ound mining ceased as of November 10, 1989	
9.	Voluntary Information:	Voluntary responses to the following issues would be helpful Department.	to the
	a. Sales to domestic u b. Sales to foreign util		
I here	by swear or affirm that the	information herein provided is true, complete and correct.	
	Holass Signature	<del></del>	
Title:_		ger	
Addre	ss: PO Box 98  Grants, IM 87020		
Date:_	2-14-90		



## MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill Sme	elter: Section	on 23 Mine			<del></del>
Name of Operator:	Homestake	Mining Comp	oany	Telephone:	287-4456
Address: Post	Office Box 9	8, Grants, N	IM 87020		
Name of Previous Oper	ator (if applicat	ole):	N/A		
Location: County _	McKinley	1/4-1/4	Full Sec. 23	Township <u>14N</u>	Range 10W
Directions to Location i	f Unsurveyed:_				
JSGS Quadrangle Map	Name:		Ambrosia Lake		
MSHA Number:		29-00	0590	<del></del>	
<u></u>					<del></del>
Type of Operation: (pl					
MINE: Su Sh	rface aft _x	Adit In Situ Le	Other	x (describe Conventional	e) Mining & Mine H <sub>2</sub>
		Smelter _		Heap Leach	Recovery
Mineral or Commodity	- · · · · <del>-</del> ·				
		-3-0			
Mineral Estate Owner:	Name	Cerri	llos Land Compa 19, Albuquerque	ny NM 87125	
	AddressTel	ephone	881-3050		
Surface Estate Owner:			undy Ranch		213 W 18 18 17 20
			water, NM 8700 876-2515	<u></u>	550.00
Mineral Estate Classific	ation: (Please	check)		27.	FEB 1990 RECEIVED Solvision
	deral	Indian	Private		Division
				1	COE 6Z 8Z IZ SIGA
the state of the s	h.ah.a.	:- f			€.0€ 62 82 rg
hereby swear or af herein provided is true,					C CD CH
Whigh	F. A. Cro	<u>Gt</u>	DO NO.	r write in thi	S SPACE
Signature			Registration By:	Number Assigne	đ
Title: Resident Ma	nager			Signature	
Address: PO Box 98 Grants, NM	87020		Title:		
Grants, No	87020		Date:		
2/14/90					



Section 24 Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake



### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400 FAX No.: (505) 476-3402

FORM 12: NOTICE OF INTENT TO SUSPEND OPERATIONS	For MMD use only
Name of Company: Rio Algom Mining LLC	
·	87020
Name of Operation: Section 24 Mine	MSHA Number: 2900776
Location: County McKinley 1/4-1/4 Sec	Section 24 Township T14N Range R10W
Directions to Location if Unsurveyed:	•
Manager or Person in Charge and Title (please print): Terry  Address: same as above  Start Up Date:	Fletcher, General Manager  Telephone: ( ) 505-287-8851
Photos and/or videos of the mine site may be filed with this fo	rm if desired.
TYPE OF OPERATION: Surface Mine Adit (please check all that apply) Shaft Insitu	Mill Other Stope leaching  Mineral Mined or Milled uranium
Check One: XX Permanent Temporary  Temporary Suspension with responsible p	Suspension Date 12/31/2002 person(s) on site at all times
COMPLETION OF SAFEGUARDING: (Note: Safeguardin All surface shafts and ventilation is secured on openings. All electrical sites is locked and fenced.  Reclamation of the site will proceed plan for the operation as described  Jenny J Heller	noles are safeguarded with metal barricades because to power sources are disconnected. Access to discondented in accordance with the approved closeout within mine permit MK009RE.
Signature / L Terry Fletcher	For MMD use only
Name (please print)	Approved Disapproved
Title: General Manager	Dv.
Address: PO Box 218	By: Signature
Grants, NM 87020	Title:
Telephone: ( ) 505-287-8851	Date:
Date: April 28, 2003	



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400

FAX No.: (505) 476-3402

## FORM 11: ANNUAL REPORT

URANIUM MINING OPERATIONS

11 Section 24 Mine Quivira Mining Co.

An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

Name of	Company: Rio Algom Mining LLC	
A 33	PO Box 218. Grants, NM USA 87020	
Mine Na	Cti 2/ Wi	per: 2900776
Location:	: County McKinley 1/4-1/4 Sec Section 24 Township T14N	
	as to Location if Unsurveyed:	
Manager	or Person in Charge and Title (please print): Terry Fletcher, General Ma	nger
Address:	same as above Telephone: ( )	
Start Up 1	Date: 1959	
1.	Was there a change in mine name, owner or operating company during the reporting year?	
	Yes No If yes, give date of change: 2 / 12 / 02	
	(month / day / year)	
	Nature of Change: Changed to a limited liability corporation	
2.	If a subsidiary of a larger company, provide the following information:	
	Name of Parent Company: Rio Algom Mining LLC Address: 6305 Waterford Blvd., Ste. 325, Oklahoma City, OK 73118	· · · · · · · · · · · · · · · · · · ·
	Telephone:( )	<u> </u>
	Type of Operation: Underground Conventional Insitu Leach	
	XX Underground Water Recovery Surface Mine	
	Other	
4.	Mine Employment Information	
	a. Average number of direct employees: Underground Surface3 Other	Total direct
	b. Total number of days of operation:	
	c. Total yearly payroll:	$\frac{100,000}{3 \text{ (all mines)}}$
	<ul> <li>d. Full time employees in reclamation (include in Total direct)</li> <li>e. Average number of contract employees, haulers, etc. (do not include in total direct):</li> </ul>	_3 (all mines
	Description and Value of Improvements Made During Year	
	a. Power Plant:	\$
	b. New Structure(s):	\$
	b. New Structure(s):	Φ
	c. Existing Structure(s):	\$
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	d. Equipment:	\$
	e. Other (specify):	\$
	c. Other (appears).	**************************************
	TOTAL:	\$ 0

6.	Percent Production by Mineral Estate Cla	ssification:		• •
	Federal	Private Indian (Reservation)	100%	
		Indian (Non-Reservation)		
7.	Production, Recovery and Value During year	ar		
	Ore milled (ST) FOB mine value (\$) Contained U <sub>3</sub> O <sub>8</sub> (Lbs.)			
	<ul> <li>b. End of Year Inventory:</li> <li>Ore on hand at beginning of report</li> <li>Ore on hand at close of reporting y</li> </ul>			
	c. Depth of production (ft.): d. Annual U <sub>3</sub> O <sub>8</sub> recovery (Lbs.): From ore From mine water (stope leaching) From insitu leach			
	<ul> <li>e. Net recovery credited to this mine (Lbs</li> <li>f. Unit value of recovered U<sub>3</sub>O<sub>8</sub> (\$/Lb.):</li> <li>g. Total sales value (\$/Lb.):</li> </ul>			
	<ul><li>h. Mine water production (de-watering) (C</li><li>i. Capacity:</li></ul>	3PD):	0	
8.	Size of Operation in Acres: 640		eage Disturbed to Date: 45 eage Reclaimed to Date:	
9.	End of Year Summary: (Events, expansion/	improvement, closures, market	s, issues, suggested State action)	
10.	Voluntary Information: Voluntary respo	onses to the following questions	would be helpful to the Department.	
	a. Sales to domestic utilities:		-	
	b. Sales to foreign utilities	<del></del>		
		**************************************		
I hereb	by swear or affirm that the information herein p	rovided is true, complete and co	orrect.	
Cianat	Terry I tleleker	Date:	1/25/03	
Signat	(PLEASE COMP	LETE ALL OF THE FOLL	OWING LEGIBLY)	
	Terry Flecther			
	(please print) General Manager			
Title:_	PO Box 218			
Addre	ss:ants, NM USA 87020			
- Gr		<del></del>		
< ne	E-mail: tfletcher@ramc.ne	t		

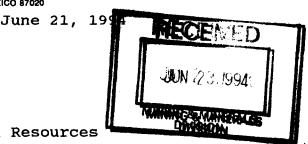
# SECTION 24

## **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

Certified Mail
Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505



Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

I have also attached a June 9, 1993, letter from Mr. Art Gebeau to Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. In January 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all responsibility for the reclamation and management of the Church Rock As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

I apologize for the delay in providing this information. As I stated to you in our telephone conversation, much of our resources have been committed to participating in the Mining and Mineral Division proposals to establish hard rock mine regulations in New Mexico. If I can be of further assistance or you need additional information, please contact me at (505) 287-8851, extension 200.

Sincerely

Terry Fletcher General Manager

Attachments: As stated

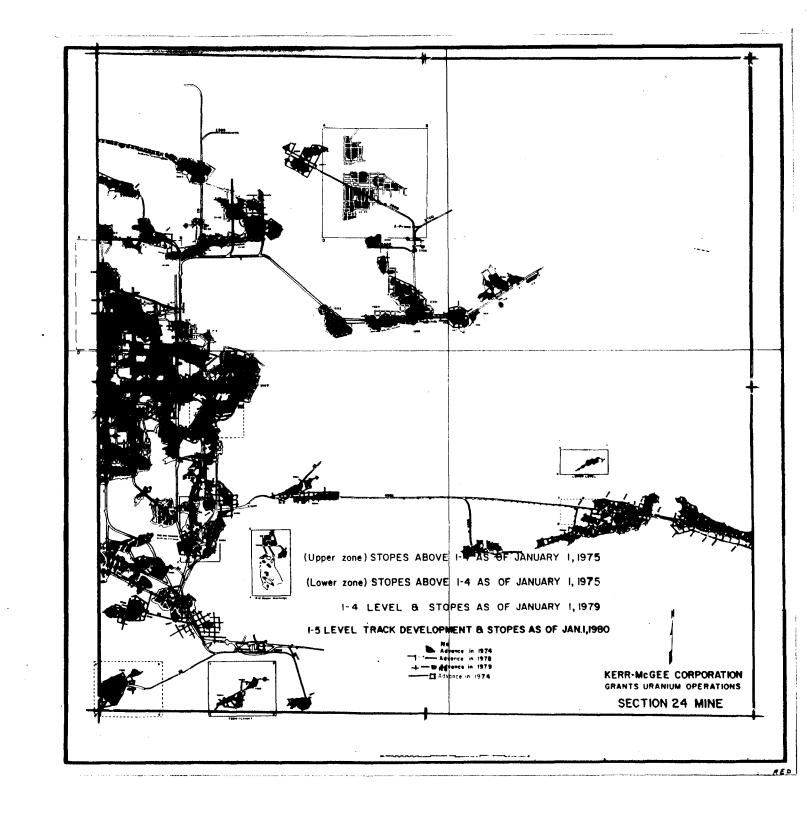
xc: B. Ferdinand (RAMC)

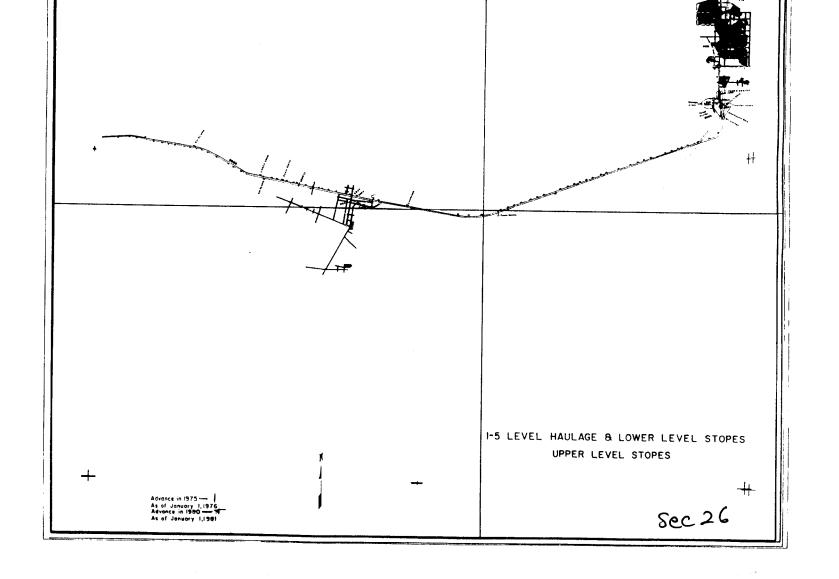
M. Freeman (RAMC)

P. Luthiger (Quivira)

R. Smith (Kerr Mc Gee)

file





ent MK

## STATE OF NEW MEXICO

## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

### SAFEGUARDING INSPECTION CHECKLIST

Mine/Company: Sec, 24 / Qumm	70	<					
Company phone: 287-8851		3					
Date of inspection: $5/27/93$		(4)					
Name of inspector: KSH							
Others present: Out Gullew Location of mine (legal description or directions to site):							
Shaft: Adit: Pit: Quarry:	Mill: High	wall(s):					
Pond: Other: (Describe):	<del></del>						
Safeguarding methods used: (describe all that a	apply) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	hemanling mine who					
Slope of pit walls or tailings:	Min	hemantling mine blo cover any area abon nicro R/h.					
Guardrails, fencing, berms or other at highw	valls: 70 co	edited R / h					
Fencing around property: (types, locks, etc.)	)	$nou$ $\sim m$ .					
Warning signs:							
Backfilling of shafts, adits, and auger boreho	oles: (how far into	opening)					
Personnel on site: Guards:							
Temporary closure methods used: (if mine is to	• •	•					
Openings sealed with steel reinforced concre	•						
Shafts sealed with steel reinforced concrete	slab or cable net cl	losure:					
Wire fence:	•						
Barbed wire (4 strands):							
Cable closure:							
Heavy rope closure:							
Support posts painted fluorescent color:							
Other:							
Beginning priority classification:		T' ll To local					
Ending priority classification (to date): $\lozenge - \lor$	mune satulia	Am as old super all on					
Ending priority classification (to date): $\lozenge - \lor$ Follow up action needed for operator to perform	m: CMW	R),					
Other comments:							
Signature of inspector: KHalm							
Title:		CHECK LIST					
Agency:		NISO date:					
Address:		ROS date:					
		Торо:					
Review by MMD Director: Date:	Initials:	Reports:					
	-	•					



STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

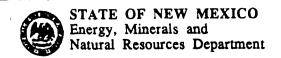


Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

#### MINE/MILL/SMELTER REGISTRATION

	0/3/	
	Rer: Section 24 Mine	
		Telephone: ( 505) 287-8851
	. Grants. NM 87020	
Manager or Person in Cl	harge and Title (please print):Arth	nur E. Gebeau, General Manager
	any (if applicable):	
Location: County MCK	inley 1/4-1/4 SE/SW Sec.	24 Township 14N Range 10W
Directions to Location if	Unsurveyed:	
USGS Quadrangle Map 1	Name:	
MSHA Number: 2900	0541 Start	Up Date: 1959
MINE TYPE:	Surface Adit Heap L	is operation:,,,,
_ MILL		_ Other (describe)
	s Processed:	
	veIntermittentIna	
Capacity: (indicate cu.y	ds. or tons, and per day, month or year)	1000 TPD at peak
	O i i wa Wining Com	
Mineral Estate Owner:	Name: Ouivira Mining Comp	
	Address: Box 218. Grants. N	
	Telephone: (505 ) 287-8851	
Surface Estate Owner:	Name: (same)	
	Address: (same)	
	Telephone:( ) (same)	
Mineral Estate Classifica State Indian	_ Federal	
I hereby swear or affirm	that the information	
herein provided is true,	complete and correct,	v <del></del>
and that all information	on this form may be	Title: General Manager_
released.	0	Title:General Manager
Actor & M	- france	Address: <u>(as above)</u>
Signature		
Arthur E. Geb	eau	Date: February 10, 1993



## MINE/MILL/SMELTER REGISTRATION

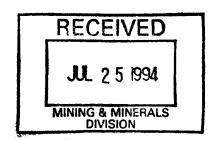
Name of Mine/Mink/Sunghar: Section 24 Min	ne
Name of Operator: Quivira Mining Company	Telephone: 287-8851
Address: P.O. Box 218, Grants, New Mex	ico 87020
Name of Previous Operator (if applicable):	
Location: County McKinley 1	/4-1/4 SW/SE Sec. 24 Township 14N Range 10W
Directions to Location if Unsurveyed:	
USGS Quadrangle Map Name: Ambrosia	Lake OLI9/
MSHA Number: 2900541	
	ter Other Heap Leach Heap Leach
Mineral or Commodity Produced: Uranium	
	Mining Company  Mineral Drive Box C-8000 Coeur D' Alene, Idaho (208) 769-4100 83814-193
Surface Estate Owner: Name Round Address P.O. Telephone	y Ranch Box 38, Bluewater, New Mexico 87005 876-2515
Mineral Estate Classification: (Please check)	
State Federal India	n PrivateX
I hereby swear or affirm that the information provided is true complete and correct.	DO NOT WRITE IN THIS SPACE
Signature	Registration Number AssignedBy:
Title: General Manager Address: P.O. Box 218 Grants, NM 87020	Signature Title: Date:
Date: 10-10-89	

Section 25 Mine Homestake Mining Co. (UNC-Homestake, Homestake-Sapin) USGS Quad: Ambrosia Lake

## **HOMESTAKE MINING COMPANY**

P.O. BOX 98 GRANTS, NEW MEXICO 87020 (505) 287-4456

July 22, 1994



State of New Mexico
Energy, Minerals and
Natural Resources Department
Mining and Minerals Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Attn.: Kay Hatton

Re: Mine Workings Maps For Sections 23 and 25 Mines

Dear Ms. Hatton:

As per your request attached are two mine working maps, one for Section 23 T14N, R10W and one for Section 25 T14N, R10W. These maps are the most up-to-date maps of the mine workings.

Should you have any other questions please contact me at the Grants office.

Sincerely,

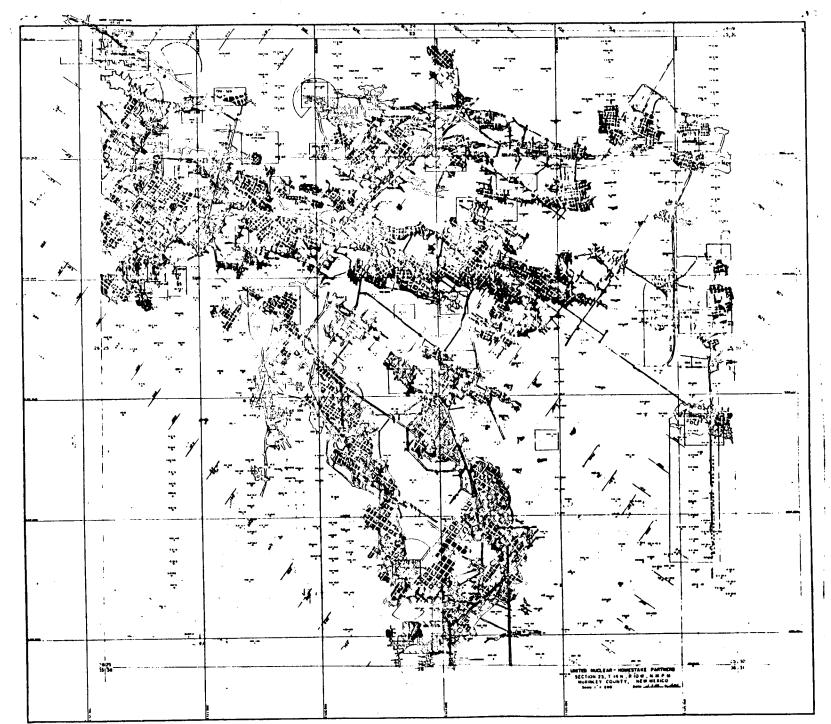
HOMESTAKE MINING COMPANY

F. R. Craft

Resident Manager

FRC:jg

Attachments (2)



Note: Section corners are highlighted

# end

# STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

### SAFEGUARDING INSPECTION CHECKLIST

Mine/Company: Lec, 25/ Homeslak	unce o	mg 4.	≺
Company phone: 287-4456			X '
Date of inspection: 5/27/93			
Name of inspector: $KSH$			25
Others present: Out Galean, Omivin	۵		7
Location of mine (legal description or direction	is to site): «	25/140/	// 0 W
Check all the following that apply:			
Shaft: Adit: Pit: Quarry:	Mill:	Highwall(s)	):
Pond: Other: (Describe):			
Commodities produced: U/			
Safeguarding methods used: (describe all that a	ıpply)		
Slope of pit walls or tailings:			
Guardrails, fencing, berms or other at highw			
Fencing around property: (types, locks, etc.)	)		
Warning signs:			
Backfilling of shafts, adits, and auger boreho hole have him backfully w. em  Personnel on site: Guards:	oles: (how f	far into openi	ing) all shafts & very
holes have her backfilled w. ear	Mr vien	nforced con	cute capsuling. since
Personnel on site: Guards:	- remove	W area is	contorned & reveg.
remporary closure methods used: (if mine is to	emporarily :	suspenaea)	J
Openings sealed with steel reinforced concre		•	
Shafts sealed with steel reinforced concrete s	slab or cable	e net closure	:
Wire fence:			
Barbed wire (4 strands):			·
Cable closure:			
Heavy rope closure:			
Support posts painted fluorescent color:			
Other:			
Beginning priority classification: 6 P			
Ending priority classification (to date): /O			
Follow up action needed for operator to perform	m:		
Other comments: Spoke & Fred Craft - or more site when we were in the or Signature of inspector: K. Haff	OK III	him that	Cabo a truk me to
more sate when we work of the	0 K 000 (7	VVII W 007	O El GOVIC ON 17-
Signature of inspector: V. Hatta	ww.		
Title:		(	CHECK LIST
Agency:		•	NISO date: $\frac{3/6/9^2}{}$
Address:			ROS date: 2/19/93
			Topo: ambrosicabale
Review by MMD Director: Date:	Initials:		Reports:
	_		<del>-</del>

ont

Mining and Minerals Division 525 Camino de los Marquez Santa Fe, NM 87503

FEB 1 9 1993

REPORT OF SAFEGUARDING
DIVISION

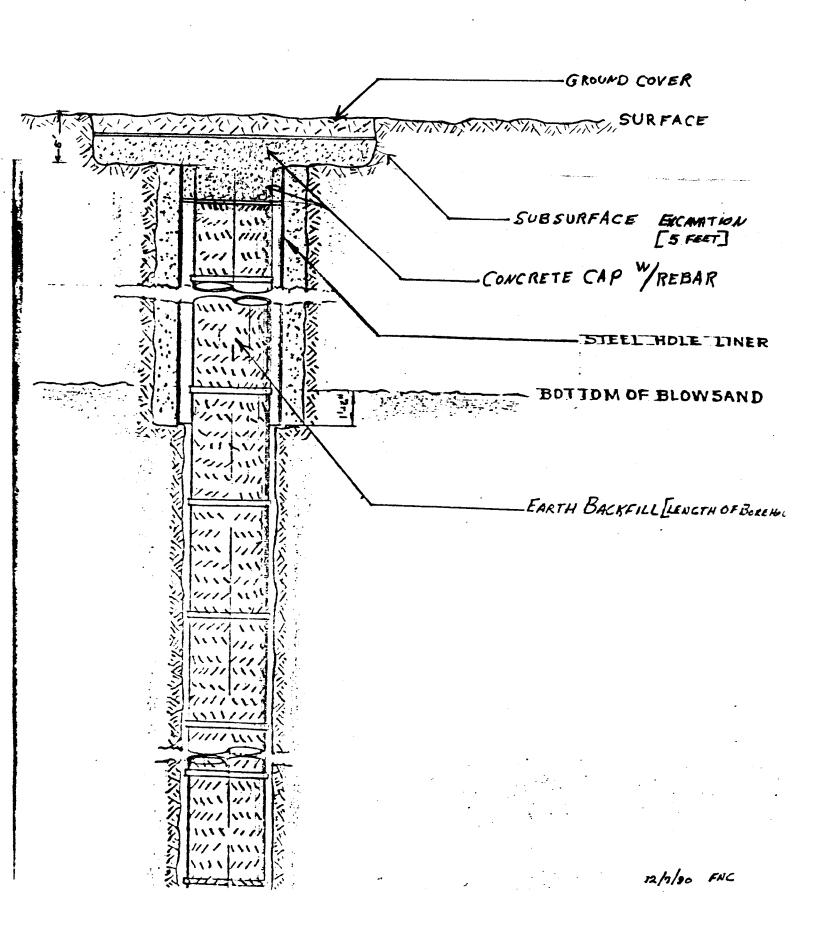
RECEIVED

BO NOT WRITE IN THE SPACE

Name of Op	perator: Home:	stake Mining	Company		
Address:	P.O. Box 98, Gran	ts, <u>NM</u> 87020	0		
Mine Name:	Section 25		M	ISHA Number	2900775
Location:	County McKinley	1/4-1/4 _	full Sec. 25	Township 14N	Range 10W
Directions to	o Location if Unsurveyed:				
		ititu	Other Mineral Mined_		
	ON OF MATERIALS A	ND PROCEDI	URES USED IN C	COMPLETE SAF	EGUARDING:
	s and ll ventilation bo d concrete cap that is				red by a
See attach	ned schematic drawing o	of a typical	"Shaft or Boreho	ole Configuration	ı."
				•	
					•
DATE OF C	COMPLETION: 7-3-9.	<u>2</u>			
hereby swe	ar or affirm that the inform	nation herein p	rovided is true, com	plete and correct.	
4	Policaft Signature				
	Signature				
Title: Resid	dent Manager				
Address:	P.O. Box 98 Grants, NM 87020				
Dote: 2-16	1-93				

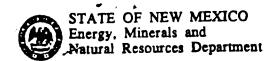
# HOMESTAKE MINING COMPANY GRANTS DIVISON

# TYPICAL BOREHOLE CONFIGURATION



# HOMESTAKE MINING COMPANY GRANTS DIVISION

TYPICAL SHAFT CONFIGURATION -GROUND COVER -CONCRETE CAP W/REBAR -FILL DIRT TO BOTTOM OF SHAFT SECTION AA 12/1/20 FNC



NOTICE OF INTENTION
TO SUSPENDE OPERATIONS

DO NOT	WRITE IN	THE	SPACE
6B			

TO SUSPEND COPERATIONS  Division  TO SUSPEND COPERATIONS  Division	
Name of Operator: Homestake Mining Company  Address: P.O. Box 98, Grants, NM 87020  Mine Name: Section 25 Mine MSHA Number: 2900775	
Location: County McKinley 1/4-1/4 full Sec. 25 Township 14N Range Directions to Location if Unsurveyed:	10W_
Type of Operation (please check):  Surface Mine Adit Other Shaft Insitu Mineral Mined	
Check One: Permanent <u>x</u> Temporary	
DESCRIPTION OF MATERIALS AND SAFEGUARDING PROCEDURES:	•
Due to depressed uranium market conditions Section 25 Mine is permanently closed. Safeguarding of mine openings and reclamation activities have begun. All shafts and ventilation boreholes have been backfilled with earth and reinforced concrete cap will cover shafts and ventilation boreholes. Surface structures have been removed and all disturbed areas will be contoured and seeded.	

Signed by: #Mast	
Signed by:	_
Address: P.O. Box 98  Grants, NM 87020	_
Telephone: (505) 287–4456	_

Appro		WRITE IN THIS SPACE
By:	Me	Graham
Title: Date:	Ack	Signature



STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5923 FAX No.: (505) 827-7195

### ANNUAL REPORT

OF

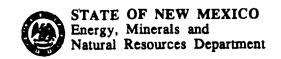
#### URANIUM MINING OPERATIONS

DO	NOT	WRITE	IN	THIS	SPACE

are to	o be re	report is to eceived by the form for eac	e Mining	g and M	inerals D	ivision b	efore F	ebruar	<b>y 15</b> of 1	the following	h Decei lowing y	mber 31 ear. Pl	. Repo	orts mit
Addre Mine Locat Direc Name Title:	ess: Name: ion: C tions to e of Pe ess:	ompany: P.O. Box Sec County Co Location i rson in Cha Resident P. Gr	x 98, Greation 2: McKinle f Unsurv rge: Manager O. Box	rants, 5 Mine ey eyed: r	1/4-1/4_ Fred (	full Craft	Sec.	25	Townsh	M ip 14	SHA No	umber:_	29-005 10W	_
1.	Was	there a char	_			_	_		_	_				
		Y	cs	<u> </u>	No	If yes	s, give	date of	change:	(mont	h/day	/ year)		
•	Natur	re of Change	c:											
2.	ная	subsidiary of		_										
		of Parent	Company	7:	· · · · · · · · · · · · · · · · · · ·		-						<del>-</del>	
3.	Туре	e of Parent ess: of Operation  Employment Average n Number of Total year Average n iption and v  Power Plan New Struct	n: Une Une	dergroun dergroun	d Conver d Water	ntional Recovery	y <u>x</u>		Insitu Surfa Othe	ı Leaci ce Mii r	ne		120	
4.	Mine	Employmen	t Inform	ation							/0	3031	1234 <sub>58</sub>	3
	* a. b. c.	Average n Number of Total year	umber of f days of ly payrol	f direct operation	employee on: 10	s: Under 00 (265 \$_71	ground days .706	1 stand	Surface_ lby)		Other 20	MAT	CT NOT	3071 6
5.	d. Descr	Average ni iption and V	umber of Value of	i contrac Improve	t employ ments M	ees, haul ade Duri	ers, etc ing Yea	:N/ IT	<u>/A</u>	-	18	Mining	& Minerals	; G
	<b>a</b> .	Power Plan	nt _								123	را مراجي کي	MAISION	314
	b.	New Struc	ture(s)		<del></del>					\$	N/A	1.61	1661 81	
	U.									<b>s_</b> _	N/A			
	C.	Existing St	ructure(s	)							N/A		_	
	d.	Equipment								\$ \$	N/A		-	
	e.	Other (spe	cify)							• \$_	N/A	· · · · · · · · · · · · · · · · · · ·	-	
		•					· . <del></del>			<del>-</del>	•	· · · · · · · · · · · · · · · · · · ·	-	
								TC	TAL:	<b>s</b> _	N/A		_	

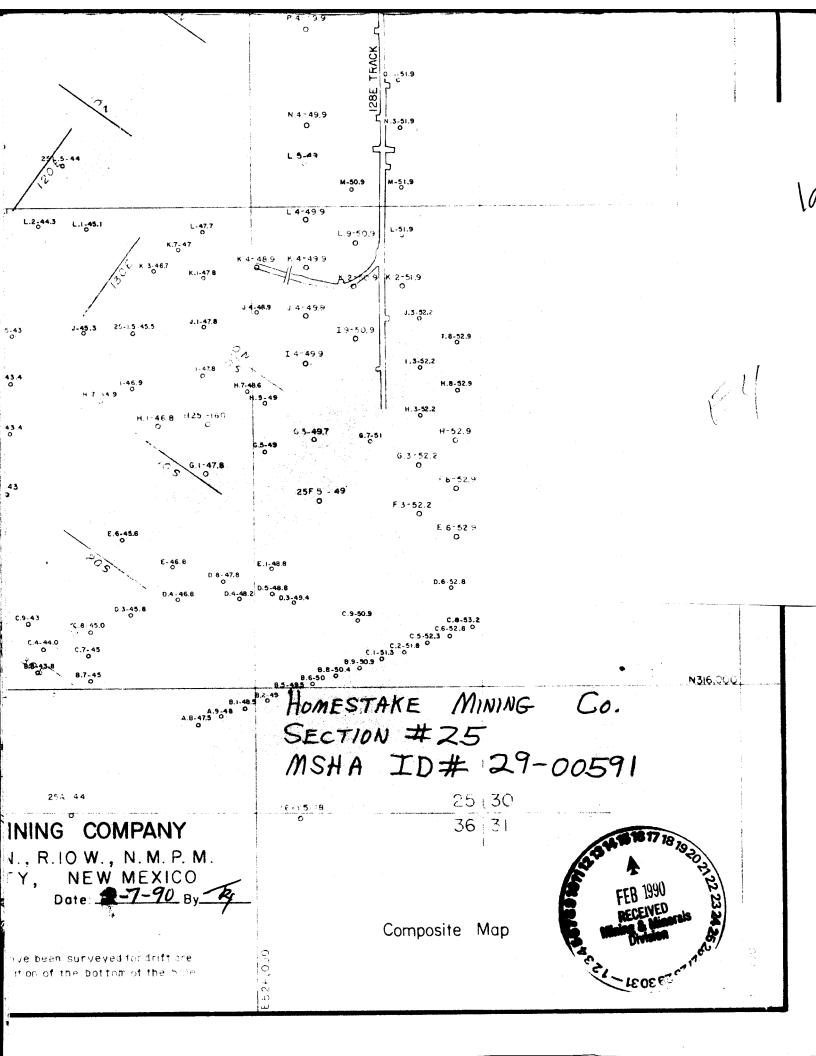
<sup>\*</sup>Average number of employees was calculated using the sum of each month's total and dividing that number by 12.

გ.	End of Year Summary (Events, expansion/improvement, closures, markets, issues, suggested state action,
	Ceased all mine water stope leaching on 4/10/90 and placed mine on standby status.
9.	Voluntary Information: Voluntary responses to the following issues would be helpful to the Department.
	a. Sales to domestic utilities: b. Sales to foreign utilities:
1-/1a1	eby swear or affirm that the information herein provided is true, complete and correct.
Signa	fred Craft
Name	(please print)
Title:	Resident Manager
Addre	P.O. Box 98  Grants, NM 87020-0011
Date:	2/14/91



### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill Sr	nelter:	Section 25 M	line	<del></del>	
Name of Operator:	Homestake Mi	ning Company		Telephone:	287-4456
Address: Post Of	fice Box 98,	Grants, NM	87020		
Name of Previous Ope	erator (if applic	:able):			
Location: County	McKinley	1/4-1/	4 <u>Full</u> Sec. <u>25</u>	Township 14N	Range10W
Directions to Location	if Unsurveyed	:			
USGS Quadrangle Maj	p Name:	Ambrosia Lal	se		<del></del>
MSHA Number:	29-	00591			
Type of Operation: (	please check)				
MINE: S	urface	Adit In Situ L	Other	X (describe Mine H <sub>2</sub> O Rec	) overy
				Heap Leach	
Mineral or Commodity	Produced:	U <sub>3</sub> O8.			_
Mineral Estate Owner:	Address_		os Land Company , Albuquerque, 1 881-3050		Marie Walter
Surface Estate Owner:	Address_	Bluewater.	Roundy Ranch NM 87005 876-2515	A W	Harring 55
Mineral Estate Classifi	cation: (Please	e check)		18	10.00
State F	Pederal	Indian	Privat	c _x	ALL IEGERIE
I hereby swear or herein provided is true Allah			DO NO	r write in this	SPACE
Signature			Registration By:	Number Assigned	
Title: Resident Mark Address: PO Box 98 Grants, NM			Title: Date:	Signature	
Date: 2-14-90					



Section 30 Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake



April 28, 2003

Date:

#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400

FAX No.: (505) 476-3402

#### For MMD use only FORM 12: NOTICE OF INTENT TO SUSPEND OPERATIONS M Rio Algom Mining LLC Name of Company: Address: PO Box 218. NM USA 87020 Grants. MSHA Number: 2900776 Section 30 Mine Name of Operation:\_\_\_ 30 T14N R9W Section\_ Township\_ Range\_ Location: County McKinley 1/4-1/4 Sec.\_\_\_\_ Directions to Location if Unsurveyed: Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager same as above Telephone: ( ) 505-287-8851 Address: 1959 Start Up Date:\_ Photos and/or videos of the mine site may be filed with this form if desired. Other Stope leaching TYPE OF OPERATION: Surface Mine Adit (please check all that apply) Insitu Mineral Mined or Milled uranium 12/31/2002 XX Permanent Check One: Temporary Suspension Date\_ Temporary Suspension with responsible person(s) on site at all times DESCRIPTION OF SAFEGUARDING PROCEDURES, MATERIALS AND FINAL SLOPES, AND TIMETABLE FOR COMPLETION OF SAFEGUARDING: (Note: Safeguarding guidelines are available upon request from MMD). All surface shafts and ventilation holes are safeguarded with metal barricades secured on openings. All electrical power sources are disconnected. Access to sites is locked and fenced. Reclamation of the site will proceed in accordance with the approved closeout plan for the operation as described within mine permit MK009RE. Terry 17 litele For MMD use only Signature Terry Fletcher Approved Disapproved Name (please print) Title: General Manager Signature Address: PO Box 218 Grants. NM 87020 Title: Telephone: ( ) 505-287-8851 Date:

* · · · · *



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400

FAX No.: (505) 476-3402

#### FORM 11: ANNUAL REPORT OF URANIUM MINING OPERATIONS

Section 30 Mine Quivira Mining Co.



An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

	Company: Rio Algom MIning LLC	
Address:_		2000776
Location:	ne: <u>Section 30 Mine</u> MSHA Number  County McKinley 1/4-1/4 Sec. Section 30 Township T14N  s to Location if Unsurveyed:	: 2900776 Range R9W
Address:_	or Person in Charge and Title (please print): <u>Terry Fletcher, General Manasame as above</u> Telephone: ( )	•
	Was there a change in mine name, owner or operating company during the reporting year?  X Yes No If yes, give date of change: 2 / 12 / 02 (month / day / year)	
	Nature of Change: Became a limited liability corporation  If a subsidiary of a larger company, provide the following information:	
]	Name of Parent Company:  Address: 6305 Waterford Blvd., Ste. 325 Oklahoma City, OK 73118  Telephone:( )	
3.	Type of Operation:  Underground Conventional  Insitu Leach  XX Underground Water Recovery  Other  Other	
1 0	Mine Employment Information  a. Average number of direct employees: Underground Surface Other  b. Total number of days of operation:  c. Total yearly payroll:  d. Full time employees in reclamation (include in Total direct)  e. Average number of contract employees, haulers, etc. (do not include in total direct):	* 100,000 3 (all mines
	Description and Value of Improvements Made During Year  a. Power Plant:	
	b. New Structure(s):	
ı	c. Existing Structure(s):	<u> </u>
(	d. Equipment:	
(	e. Other (specify):	
	TOTAL: \$	<u> </u>

	Closed shaft and one vent hole	e and revegetated these areas per the
	approved closeout plan.	
10.	Voluntary Information: Voluntary responses to the a. Sales to domestic utilities: b. Sales to foreign utilities	e following questions would be helpful to the Department.  N/A
I herel		true, complete and correct.  Date: 4/25/03  LL OF THE FOLLOWING LEGIBLY)
	Terry Flecther	,
Name Title:	(please print) General Manager	<b></b>
Addre	PO Box 218	- -
Gr	ants, NM USA 87020	
\rightarrow ne int	> F-mail'	

# SECTION 30

# **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

June 21, 1994

Certified Mail
Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505



Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

I have also attached a June 9, 1993, letter from Mr. Art Gebeau to Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. In January 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on McGee. the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all responsibility for the reclamation and management of the Church Rock As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

I apologize for the delay in providing this information. As I stated to you in our telephone conversation, much of our resources have been committed to participating in the Mining and Mineral Division proposals to establish hard rock mine regulations in New Mexico. If I can be of further assistance or you need additional information, please contact me at (505) 287-8851, extension 200.

Lerry of Felliker,

Terry Fletcher General Manager

Attachments: As stated

xc: B. Ferdinand (RAMC)

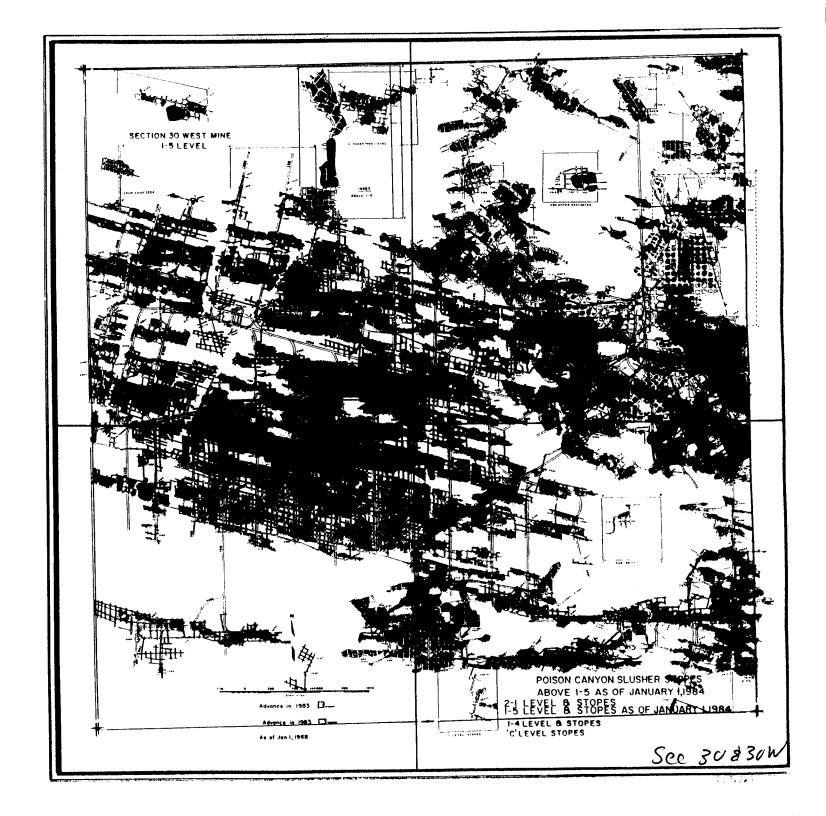
M. Freeman (RAMC)

P. Luthiger (Quivira)

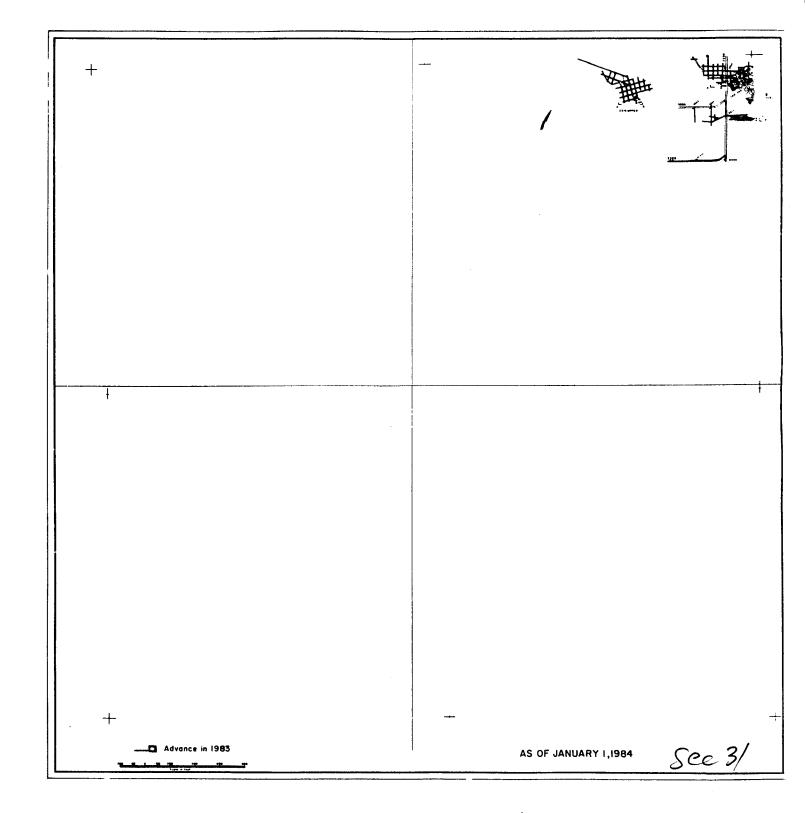
R. Smith (Kerr Mc Gee)

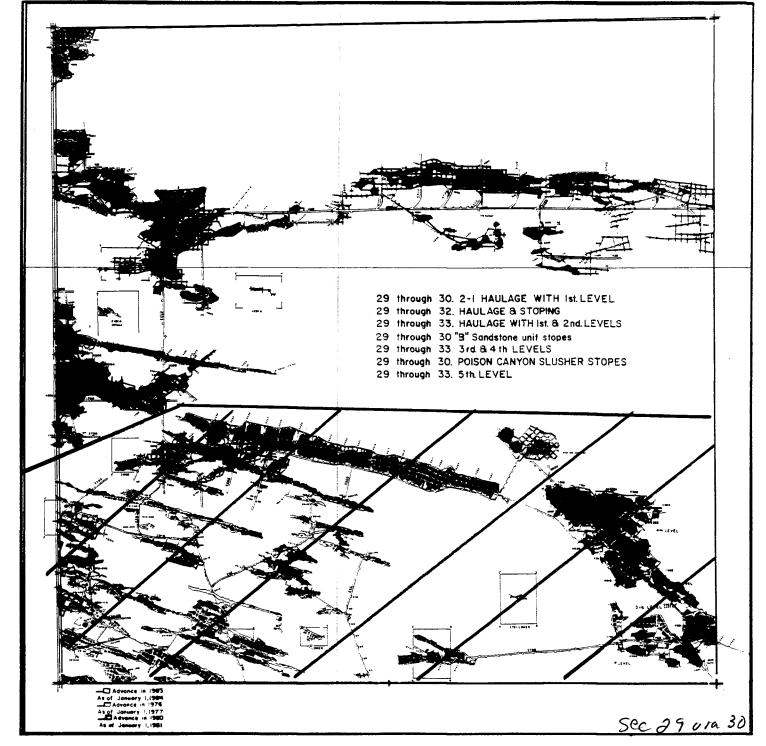
file



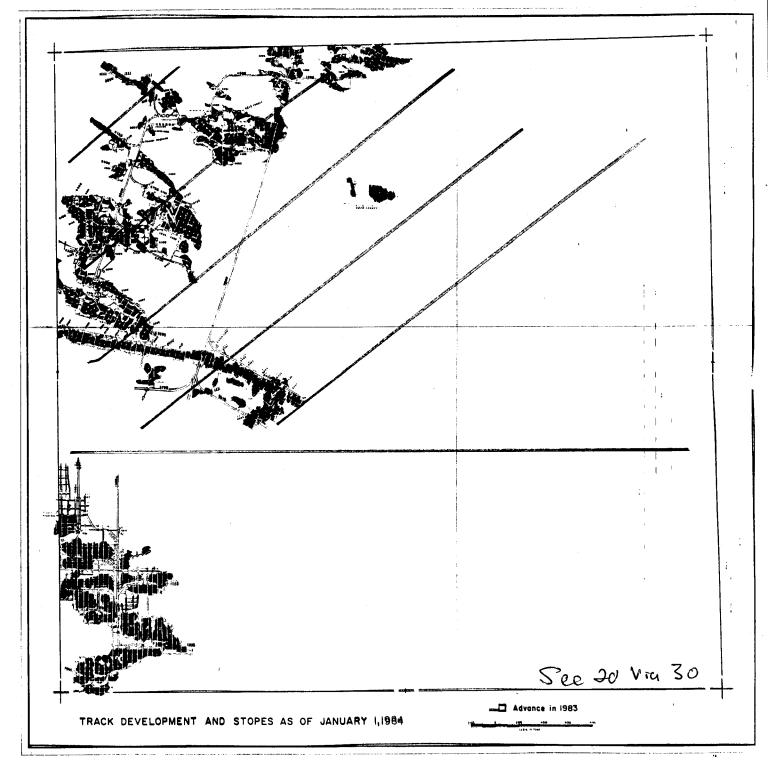


Section 31





SELHOH 20



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### STATE OF NEW MEXICO

### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

# SAFEGUARDING INSPECTION CHECKLIST

Mine/Company: De, 30 / Ours	Δ	₹									
Company phone: 287_8851											
Date of inspection: $5/27/93$											
Name of inspector: $(x, y, y)$											
Others present: (MA G Mean Location of mine (legal description or directions to site):  Check all the following that apply:											
									Shaft: Adit: Pit: Quarry	: Mill: Hi	ghwall(s):
									Pond: Other: (Describe):		
Commodities produced: Ur		a by taken down									
Safeguarding methods used: (describe all	that apply) Lead	frame to the vacerous									
Slope of pit walls or tailings:	I for merap. X	and has been contoured -									
Guardrails, fencing, berms or other at l	nighwalls: When Me	Convied to seduce andiction									
Fencing around property: (types, locks,	etc.)										
Warning signs:	•	Campi									
Commodities produced: Ur Safeguarding methods used: (describe all Slope of pit walls or tailings: Sold Guardrails, fencing, berms or other at l Fencing around property: (types, locks, Warning signs: Backfilling of shafts, adits, and auger b	oreholes: (how far it	ito opening) opinings capp									
Just mit plugged. Personnel on site: Guards:											
Personnel on site: Guards:	<u> </u>	1.15									
Temporary closure methods used: (if mine is temporarily suspended)											
Openings sealed with steel reinforced c	•										
Shafts sealed with steel reinforced conc	rete slab or cable ne	closure:									
Wire fence:		•									
Barbed wire (4 strands):											
Cable closure:											
Heavy rope closure:											
Support posts painted fluorescent color:											
Other:											
Beginning priority classification:	i i la la la la la la la la la la la la la	_									
Ending priority classification (to date): O		MWR									
Follow up action needed for operator to p	erform:										
Other comments.											
Other comments:											
Signature of inspector: K, lt.											
Title:		CHECK LIST									
Agency:		NISO date:									
Address:		ROS date:									
		Торо:									
Review by MMD Director: Date:	Initials:	Reports:									



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#### STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

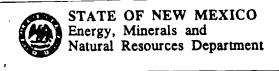


Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

#### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Sme	Rection 30 Mine						
		Telephone: (505) 287-8851					
	, Grants, NM 87020	Telephone. (3-3)	_				
		thur E. Gebeau. General Manager					
	any (if applicable):						
Location: County McK	inley 1/4-1/4 SE/NE Sec.	. 30 Township 14N Range 9W					
Directions to Location if	Unsurveyed:						
	Name:						
MSHA Number: 2900541 Start Up Date: 1959							
MINE TYPE: MILL	Surface Adit Heap SMELTER	r this operation:					
Minerals or Commoditie	s Produced: <u>Uraniım</u>						
Minerals or Commoditie	s Processed:						
Status: X Acti	ve Intermittent I	Inactive Under Development					
Capacity: (indicate cu.y	ds. or tons, and per day, month or year	ear) 1000 TPD at peak					
Mineral Estate Owner:		Company Hecla Mining Company					
	Address: Box 218, Grants		01/				
	Telephone: ( 505 ) 287-8851		014				
Surface Estate Owner:	Name: Ouivira Mining Company						
	Address: Box 218, Grants	NM 87020					
	Telephone:( ) (as above	re)					
Mineral Estate Classifica  State Indian	_ Federal						
I hereby swear or affirm herein provided is true, and that all information	complete and correct,						
released.	•	Title:General Manager	<u> </u>				
atten 9	Mon	Address: (as above)					
Signature		February 10, 1993					
Arthur E. Geb Name (please print)	eau	Date:	_				



## MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mikk Soxelter: Section 30	) Mine
Name of Operator: Quivira Mining Compa	Telephone: 287-8851
Address: P.O. Box 218, Grants, New Me	
Name of Previous Operator (if applicable):	
Location: County McKinley	1/4-1/4 NE/SE Sec. 30 Township 14N Range 9W
Directions to Location if Unsurveyed:	
USGS Quadrangle Map Name: Ambrosia	Lake
MSHA Number: 2900541	and the same of th
	it Other Office filt [] situ Leach Heap Leach Management   Hea
Mineral or Commodity Produced: Uraniu	m *17181118
Telephone	la Mining Company O Mineral Drive Box C-8000, Coeur D' Alene, Idaho (208)769-4100 83814-193
Address P.0	Box 218, Grants, NM 87020 287- <b>8</b> 851
Mineral Estate Classification: (Please check)	
State Federal Inc	lian Private X
I hereby swear or affirm that the inform herein provided is true complete and correct.  Signature  Title: General Manager Address: P.O. Box 218 Grants, NM 87020	DO NOT WRITE IN THIS SPACE  Registration Number Assigned By: Signature  Title: Date:
D-4 10 10-00	

Section 30 W Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake

Table 1



## STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400 FAX No.: (505) 476-3402

FORM 12: NOTICE OF INTENT TO SUSPEND OPERATIONS	For MMD use only
Name of Company: Rio Algom Mining LLC	
	020
Name of Operation: Section 30 Mine	MSHA Number: 2900776
Location: County McKinley 1/4-1/4 Sec. Sec. Sec. Directions to Location if Unsurveyed:	ection 30 Township T14N Range R9W
Manager or Person in Charge and Title (please print): Terry Finance Address:	letcher, General Manager  Telephone: ( ) 505-287-8851
Start Up Date: 1959	
Photos and/or videos of the mine site may be filed with this form	if desired.
TYPE OF OPERATION: Surface Mine Adit (please check all that apply) Shaft Insitu	Mill Other Stope leaching  Mineral Mined or Milled uranium
Check One: XX Permanent Temporary  Temporary Suspension with responsible pers	Suspension Date 12/31/2002
COMPLETION OF SAFEGUARDING: (Note: Safeguarding g All surface shafts and ventilation hol secured on openings. All electrical p sites is locked and fenced.	les are safeguarded with metal barricades bower sources are disconnected. Access to in accordance with the approved closeout
Signature J J LUCKUS	For MMD use only
Terry Fletcher	
Name (please print)	Approved Disapproved
Title: General Manager	<b>By:</b>
Address: PO Box 218	Signature
Grants, NM 87020	Title:
Telephone: ( ) 505-287-8851	Date:
Date: April 28, 2003	

		•
		<b>)</b>
		<b>)</b>



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400

FAX No.: (505) 476-3400

# FORM 11: ANNUAL REPORT OF URANIUM MINING OPERATIONS

11 Section 30w Mine Quivira Mining Co.



An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

	Company: Rio Algom Mining LLC PO Box 218, Grants, NM USA 87020	
Location: C		er: 2900776 Range R9W
Address:	r Person in Charge and Title (please print): Terry Fletcher, General Massame as above Telephone: ( )	nager
	Vas there a change in mine name, owner or operating company during the reporting year?  Yes No If yes, give date of change: 2 / 12 / 02 (month / day / year)	
2. If <b>N</b>	ature of Change: Changed to a limited liability corporation  a subsidiary of a larger company, provide the following information:  ame of Parent Company: Rio Algom Mining LLC  ddress: 6305 Waterford Blvd., Ste. 325, Oklahoma City, OK 731	18
Te	elephone:( )	
a. b. c. d. e.	Total number of days of operation: Total yearly payroll: Full time employees in reclamation (include in Total direct) Average number of contract employees, haulers, etc. (do not include in total direct):	Total direct3  \$100,00 3 (all mines
<ol> <li>De</li> <li>a.</li> </ol>	escription and Value of Improvements Made During Year  Power Plant:	\$
b.	New Structure(s):	\$
c.	Existing Structure(s):	\$
d.	Equipment:	\$
e.	Other (specify):  TOTAL:	\$ \$ 0

У.	End of 1	ear Summary:	(Events, expans	sion/improvemen	nt, closures, mark	kets, issues, su	ggested State a	action)	
10.	Volunta	ry Information:	Voluntary r	responses to the f		ons would be h	nelpful to the D	epartment.	
	a. b.	Sales to dome: Sales to foreig		/ALP de d	N/A				
		J				<del></del>			
I hereb	Ter	r affirm that the	eleken	rein provided is t	Date:_	4/25	EGIBLY)		
	Terry	Flecther							
Name Title:		rint) eral Manag	er						
Addres	PO	Box 218							
Gr	ants,	NM USA	87020						
ne	> H <sub>-1</sub>	mail:tfl	etcher@ramo	e.net					

Form 10 (4/03)

# SECTION 30W

## **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

June 21, 199

Certified Mail
Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505



Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

have also attached a June 9, 1993, letter from Mr. Art Gebeau to Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. In January 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on McGee. the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all responsibility for the reclamation and management of the Church Rock As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

I apologize for the delay in providing this information. As I stated to you in our telephone conversation, much of our resources have been committed to participating in the Mining and Mineral Division proposals to establish hard rock mine regulations in New Mexico. If I can be of further assistance or you need additional information, please contact me at (505) 287-8851, extension 200.

Lerry of Fillippe

Terry Fletcher General Manager

Attachments: As stated

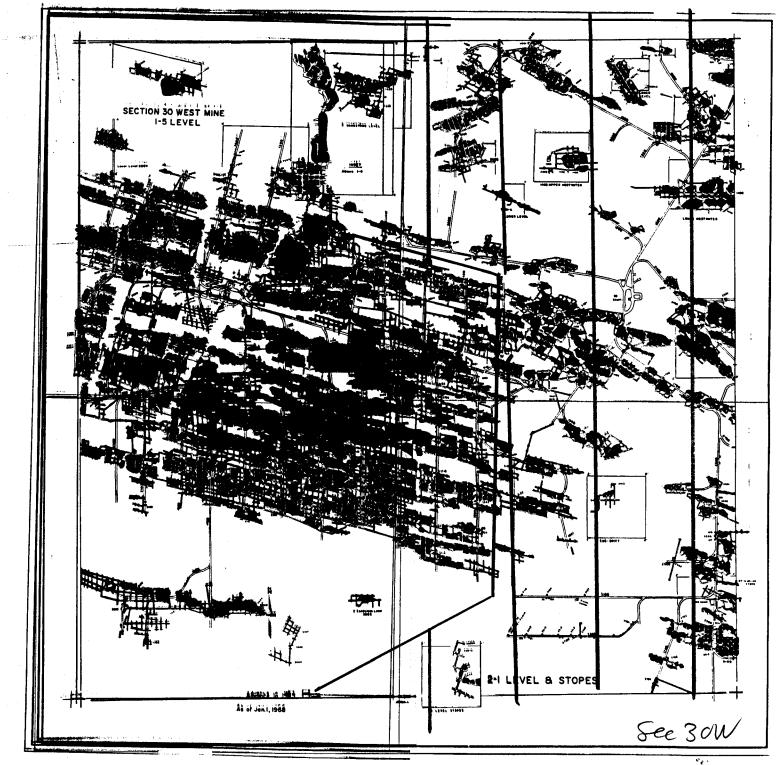
xc: B. Ferdinand (RAMC)

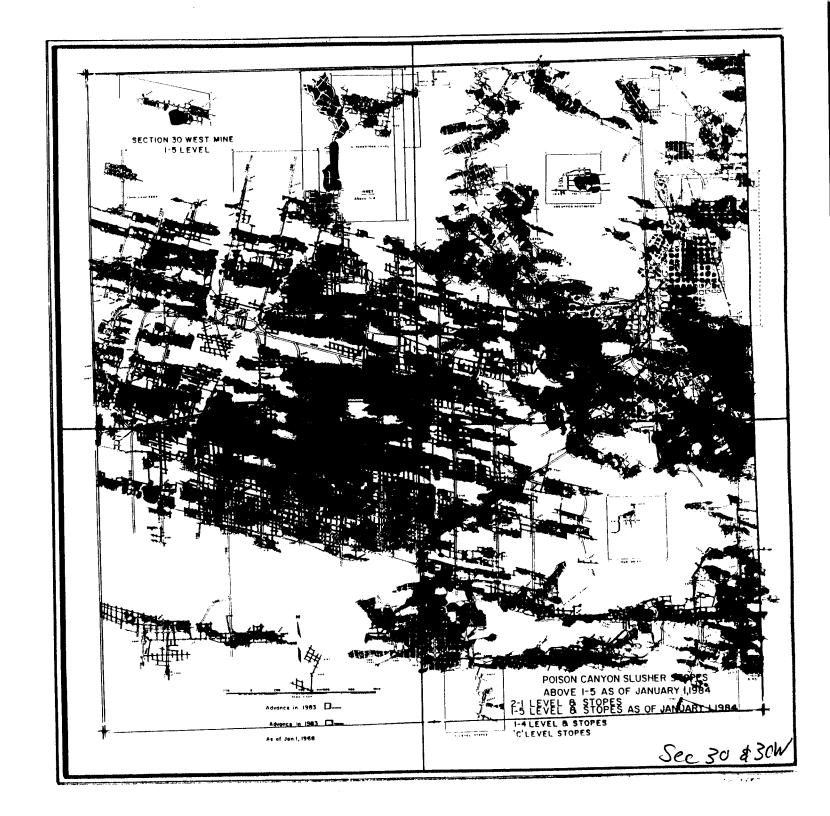
M. Freeman (RAMC)

P. Luthiger (Quivira)

R. Smith (Kerr Mc Gee)

file





# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

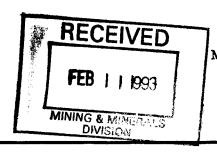
#### SAFEGUARDING INSPECTION CHECKLIST

Mine/Company: Sec. 30 W/ Quur	na	₹						
Company phone: 287 - 885)		0 5						
Date of inspection: 5/27/93		(Control of the control						
Name of inspector: $\not\vdash S \not\vdash$								
Others present: and Geleum  Location of mine (legal description or directions to site):								
Shaft: Adit: Pit: Quarry:	Mill: H	lighwall(s):						
Pond: Other: (Describe): Commodities produced:								
Commodities produced: U	- M A	1						
Safeguarding methods used: (describe all that Slope of pit walls or tailings: ALA R C Guardrails, fencing, berms or other at high Fencing around property: (types, locks, etc Warning signs:  Backfilling of shafts, adits, and auger bore	· wk se	aching.						
Personnel on site: Guards:								
Temporary closure methods used: (if mine is Openings sealed with steel reinforced conc Shafts sealed with steel reinforced concrete Wire fence: Barbed wire (4 strands): Cable closure: Heavy rope closure: Support posts painted fluorescent color: Other: Beginning priority classification: Ending priority classification (to date):	e slab or cable no	wall: et closure:						
Other comments:								
Signature of inspector: K. Harm								
Title:		CHECK LIST						
Agency:		NISO date:						
Address:		ROS date:						
		Topo:						
Review by MMD Director: Date:	Initials:	Reports:						





#### STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

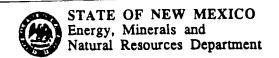


Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505 Telephone: (505) 827-5970

FAX No.: (505) 827-7195

#### MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Smelter: Section 30 West Mine
Name of Company: Quivira Mining Company Telephone: (505) 287-8851
Address: Box 218, Grants, NM 87020
Manager or Person in Charge and Title (please print): Arthur E. Gebeau, General Manager
Name of Previous Company (if applicable):
ocation: County McKinley 1/4-1/4 SE/NW Sec. 30 Township 14N Range 9W
Directions to Location if Unsurveyed:
JSGS Quadrangle Map Name:
MSHA Number: 2900541 Start Up Date: 1970
Please list all Standard Industrial Classification (SIC) codes for this operation:
MILLSMELTEROther (describe)
Minerals or Commodities Produced: <u>Uranium</u>
Minerals or Commodities Processed:
Status: X Active Intermittent Inactive Under Development
Capacity: (indicate cu.yds. or tons, and per day, month or year) 800 TPD at peak
Wools Mining Company Hools Mining Company
Mineral Estate Owner: Name: Quivira Mining Company Hecla Mining Company  One of the Company Hecla Mining Company  One of the Company Hecla Mining Company  One of the Company Hecla Mining Company
Address: Box 218, Grants, NM 6500 Mineral Drive  Talanhara, 505 \ 287-8851 Couer d'Alene, Idaho 83814
Telephone: (303)
Surface Estate Owner: Name: Quivira Mining Company
Address: <u>(as above)</u>
Telephone:( ) (same)
Mineral Estate Classification: (Please check)  State Federal Indian _X Private
hereby swear or affirm that the information
nerein provided is true, complete and correct,
eleased.  Title: General Manager
hether 4 Moham Address: (as above)
Signature
Arthur E. Gebeau Name (please print)  Date: February 10, 1993



## MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mink	Soxedxer: Section	on 30W Mine			
Name of Operator:_	Quivira Mining	g Company		Telephone:28	37-8851
Address: P.C	). Box 218, Gran	ts,_New Mexic	o 87020		
Name of Previous C	perator (if applicab	ole):			
Location: County	y <u>McKinley</u>	1/4-1/4	NW/SE Sec. 30	_ Township 14N	Range 9W
Directions to Location	on if Unsurveyed:				
USGS Quadrangle M	Map Name: Ambr	osia Lake		<u> </u>	7.
MSHA Number:				A 200	1000
Type of Operation: MINE:	(please check)  Surface ShaftX	Adit In Situ Lea	Other	(describe)	/ED
Mineral or Commod	<del></del>	Smelter ranium	1	Heap Leach (8)	
Mineral Estate Own	er: Name Address Tele	Hecla Minin 6500 Minera ephone (208)	g Company   Drive, Box C-8     Drive	000, Coeur D'Al	ene, Idaho 83814-1931
Surface Estate Owne	Address		ing Company 3. Grants, New M 351	Mexico 87020	
Mineral Estate Class	sification: (Please	check)			
State	Federal	Indian	Private	<u> </u>	
I hereby swear or herein provided is t	r affirm that the rue, complete and c	information correct.	DO NOT	WRITE IN THIS	SPACE
Signature	2001 10000		Registration N By:	umber Assigned	
Address: P.O. B	1 Manager ox 218 , NM 87020		Title:Date:	Signature	
Date: 10-10-	89				

Section 32 Mine Homestake Mining Co. (UNC-Homestake, Homestake-Sapin) USGS Quad: Ambrosia Lake

Mining and Minerals Division 525 Camino de los Marquez Santa Fe, NM 87503

DO NOT WRITE IN THIS SPACE

100

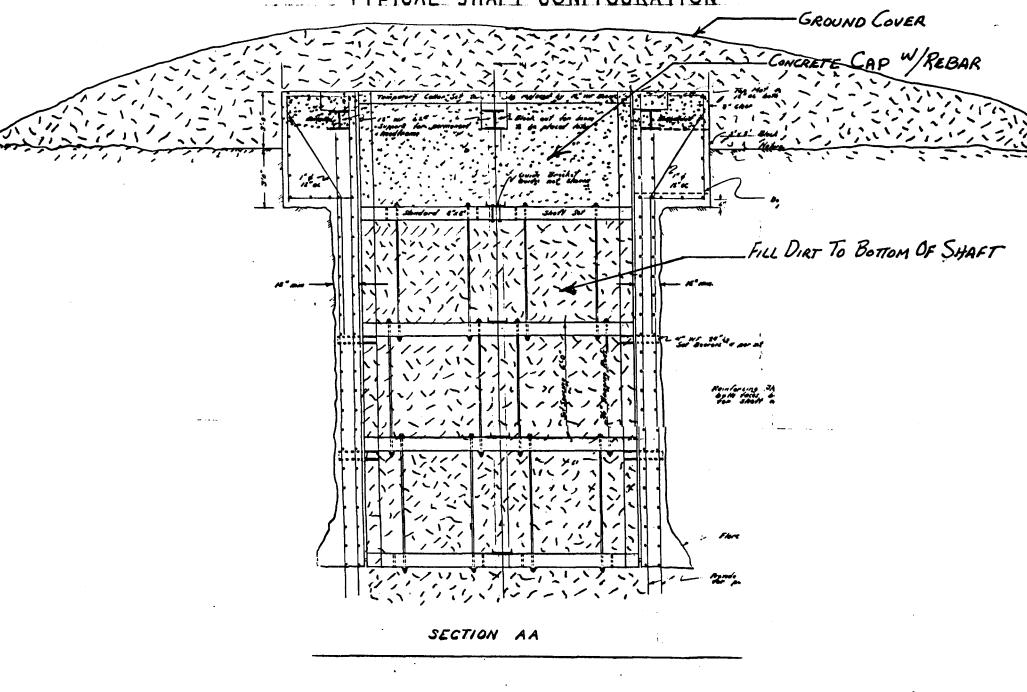
# REPORT OF SAFEGUARDING

Durage	1.5	2/6	4.7

Name of Operate	or:	Homestake	Mining Compar	ıy		
Address:	P.O. Box	98, Grants, NM	87020-0011			- MATERIAL
Mine Name:	Section 3	2, 14N, 9W		MSHA Nun	nberN	J/A
Location: Co	ounty <u>McKinl</u>	ey 1/4-1	1/4 <u>3/4</u> Sec.		nip <u>14N</u>	Range 9W
Directions to Lo	ocation if Unsu	rveyed:				
Type of Operation Surface M. Shaft	on (please chec	k): Adit Insitu	Other Mineral	Mined		
DESCRIPTION (include quantities		(ALS AND PROC	CEDURES USEI	O IN COMPLET	ΓĹ SAFE(	GUARDING:
by welding 3/ schematic dra and given 4 y 25 ft. x 25 f The areas	<pre>/4 inch steel awing of a "t /ears time to ft. by 3 feet // were covered</pre>	all 4 surface in plate to the harpical Borehole compact. The thick (60 yd.3 l with several fixed early in 199	ole casing as Configuration 16 foot by 10 reinforced ( eet of topsoil	is illustrated n". The mine s foot shaft was concrete cap.	l by the at shaft was b s then cove	tached backfilled ered by a
for but	gnature	November, 1990  the information here  the state of the st	ein provided is t	rue, complete and		1234567600
Address: P.	nt Manager .O. Box 98	7020-0011			82 LS SC ST CO ST	1234567 A 1991 CEIVED CEIVED Some & Minerals Division 12026181139

# HOMESTAKE MINING COMPANY GRANTS DIVISION

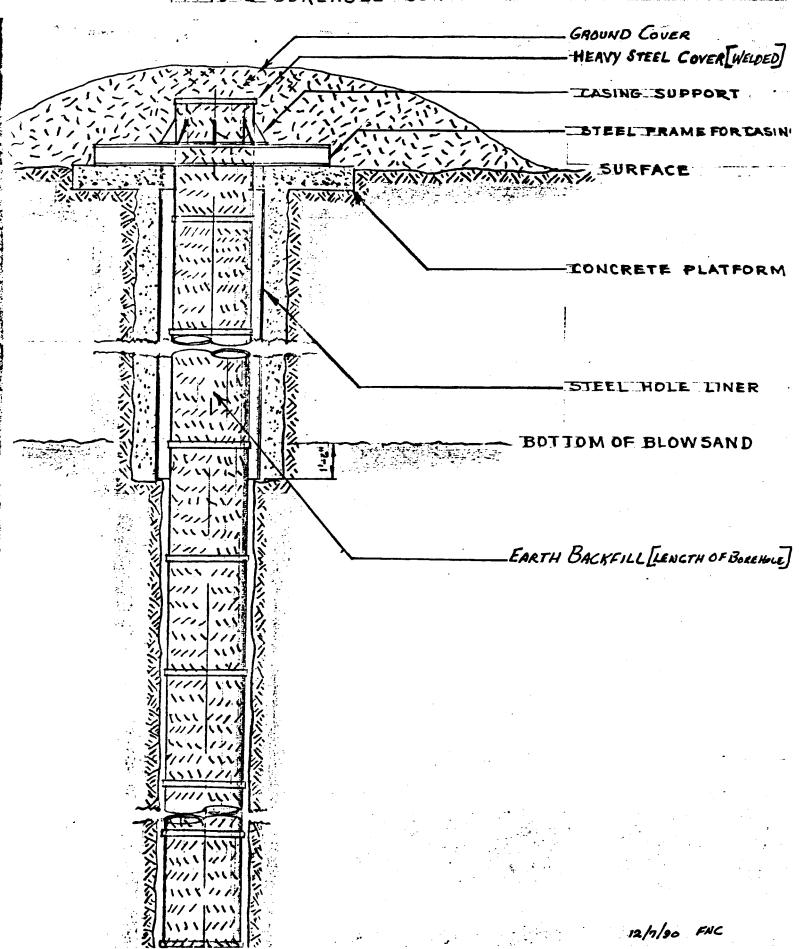
TYPICAL SHAFT CONFIGURATION



12/1/20 FNC

# HOMESTAKE MINING COMPANY GRANTS DIVISON

TYPICAL BOREHOLE CONFIGURATION



Section 33 Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake



Date:

# STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400 FAX No.: (505) 476-3402

<b>FORM 12:</b>	NOTICE	OF INTEN	I
TO SUSP	END OPI	ERATIONS	

For MMD use only

TO SUSPEND OPERATIONS	Ar
Name of Company: Rio Algom Mining LLC	
Address: PO Box 218, Grants, NM USA 8702	0
Name of Operation: Section 33 Mine	MSHA Number: 2900776
Location: County McKinley 1/4-1/4 Sec. Section	on 33 Township T14N Range R9W
Directions to Location if Unsurveyed:	
Manager or Person in Charge and Title (please print): Terry Fleaddress: Same as above  Start Up Date: 1965	T-1 ) 005
Photos and/or videos of the mine site may be filed with this form if o	desired.
TYPE OF OPERATION: Surface Mine Adit (please check all that apply) Shaft Insitu	Mill Other Stope leaching  Mineral Mined or Milled uranium
Check One: XX Permanent Temporary  Temporary Suspension with responsible person	Suspension Date $12/31/2002$ (s) on site at all times
sites is locked and fenced. Reclamation of the site will proceed in plan for the operation as described with	elines are available upon request from MMD).  s are safeguarded with metal barricades wer sources are disconnected. Access to accordance with the approved closeout
Signature / Terry Fletcher	
Name (please print)	Approved Disapproved
Title: General Manager	Ву:
Address: PO Box 218	Signature
Grants, NM 87020	Title:
Telephone: ( ) 505-287-8851	Date:
April 28, 2003	



STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department tue.

### RECEIVED

OCT 0 9 1996

Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

MINING & MINERALS DIV.

# NOTICE OF INTENTION TO SUSPEND OPERATIONS

For MMD use only 8B

	à inima Minima Co	
	ny: Quivira Mining Co.	200
Address:		
	ame: Section 33	
•		Section 33 Township: 14N Range 9W
Directions to Lo	ocation if Unsurveyed:	
Photos and/or v	videos of the mine site may be filed with this	form if desired.
	1959	
Type of Operation	on (please check):	
Surface		ll Other
Shaft	Insitu Mi	neral Mined or Milled Uranium
Check One:	Permanent Temporary	X Suspension Date 4/30/92
Check one.	Temporary Suspension with responsible person	
approved not reflect over grey	is fenced behind locked gas plate or expanded metal we of the site has been comple purements under the Mining	steel plate welded in place. Mine site te. Vent holes are covered with steel lded or bolted in place. Prior reclamation eted.  Mill site and general office location.
Signature  Name (please pr	Terry L Fletcher	For MMD use only  Approved  Disapproved
		-9 *
Title:	General Manager	Ву:
Address:	PO Box 218 Grants NM 87020	Signature  Title: Division Director
Telephone:(	) 505 287 8851	Date: 17/30/96
Date signed:	0/7/96	

# SECTION 33

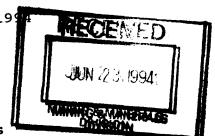
# **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

June 21, 199

Certified Mail
Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505



Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

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Lerry of Fellen

Terry Fletcher General Manager

Attachments: As stated

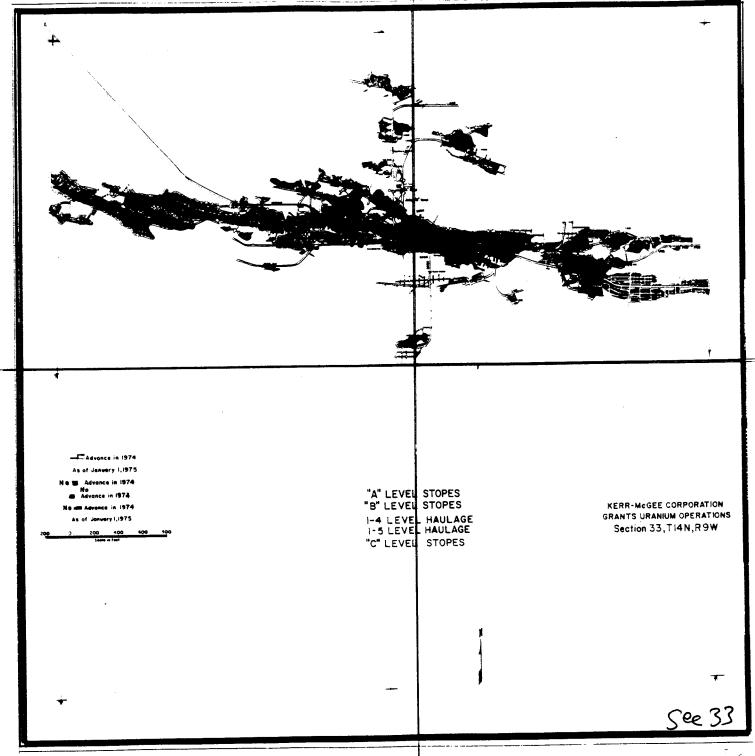
xc: B. Ferdinand (RAMC)

M. Freeman (RAMC)

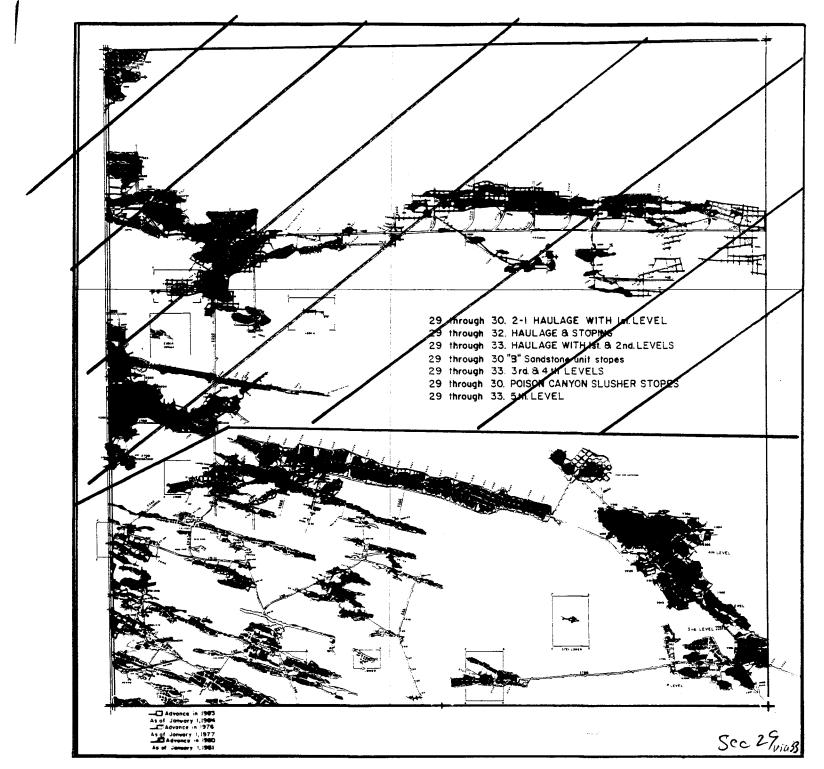
P. Luthiger (Quivira)

R. Smith (Kerr Mc Gee)

file



France



### STATE OF NEW MEXICO

# ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT MINING AND MINERALS DIVISION MINE REGISTRATION AND GEOLOGICAL SERVICES

## SAFEGUARDING INSPECTION CHECKLIST

Date of inspection: 5/27/93	
Name of inspector: $kS \mapsto$	
Others present: (wt G ellan	1-4- 3- 144 - 1 ×
Location of mine (legal description or directions to site): $N \in \mathcal{N}$	180 33/14N/9W
Check all the following that apply:	-h11/a).
Shaft: Adit: Pit: Quarry: Mill: Hig Pond: Other: (Describe):	gnwaμ(s):
Commodities produced: UC	
Safeguarding methods used: (describe all that apply)  Slope of pit walls or tailings: Gentle slope (Guardrails, fencing, berms or other at highwalls:	Covered & reduce radiate
Fencing around property: (types, locks, etc.)	
Warning signs: Backfilling of shafts, adits, and auger boreholes: (how far in the last)	to opening) Shaft has welde
Personnel on site: Guards:	
Temporary closure methods used: (if mine is temporarily suspe Openings sealed with steel reinforced concrete or masonry w Shafts sealed with steel reinforced concrete slab or cable net Wire fence: Barbed wire (4 strands): Cable closure:	vall:
Heavy rope closure: Support posts painted fluorescent color: Other: Beginning priority classification:	
Support posts painted fluorescent color: Other:	g intermittently. (MWK)
Support posts painted fluorescent color: Other:	g cintermittently. (MWK) VISO submitted.
Support posts painted fluorescent color: Other: Beginning priority classification: Ending priority classification (to date): O - And pumping Follow up action needed for operator to perform:	g intermittently. (MWK)
Support posts painted fluorescent color: Other: Beginning priority classification: Ending priority classification (to date): O - Italy pumping Follow up action needed for operator to perform:  Other comments: See J.W. # 10-	g intermittently. (MWK) VISO submitted.
Support posts painted fluorescent color: Other: Beginning priority classification: Ending priority classification (to date): O - And pumping Follow up action needed for operator to perform:  Other comments: See Anth # 10.  Signature of inspector:	CHECK LIST
Support posts painted fluorescent color: Other: Beginning priority classification: Ending priority classification (to date): O - Italy pumping Follow up action needed for operator to perform:  Other comments: See Awth # 10- Signature of inspector: Title: Agency:	CHECK LIST NISO date:
Support posts painted fluorescent color: Other: Beginning priority classification: Ending priority classification (to date): O - Ital pumping Follow up action needed for operator to perform:  Other comments: In girth # 10.  Signature of inspector: Title:	CHECK LIST NISO date: ROS date:
Support posts painted fluorescent color: Other:  Beginning priority classification: Ending priority classification (to date): O - Ital pumping Follow up action needed for operator to perform:  Other comments: Lee J.W. # 10-  Signature of inspector: Title: Agency:	CHECK LIST  NISO date:  ROS date:  Topo:



### STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

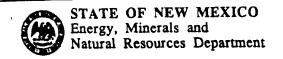


Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505

Telephone: (505) 827-5970 FAX No.: (505) 827-7195

### MINE/MILL/SMELTER REGISTRATION

	. Soction	33 Mine	۵					
Name of Mine/Mill/Sme					<b>—</b>	, 505 × 2	97 885	
Name of Company: 0					_ Telephone:	( 303)	.07-005	<u> </u>
Address: Box 218					0-1	0 1	Manaa	
Manager or Person in C			Arthu	Ir E.	Gebeau.	General	. Manag	eı
Name of Previous Comp	any (if applicable):	NITT / NITT		2.2		14N		9W
Location: County McK					=		Range .	
Directions to Location is	f Unsurveyed:		4.F.T.		<del></del>			
USGS Quadrangle Map								
MSHA Number: 29	00541		Start \	Up Date:	1959			
Please list all Standard MINE TYPE: MILL	Surface /	Adit	Heap Le	ach 2	K Shaft	_ In Situ	Leach	
Minerals or Commoditie	<del></del>			_				
Minerals or Commoditie							<del>.</del>	
				.:	II-dea D			
Status: Acti Capacity: (indicate cu.)	ive X Intermitte							
Capacity: (indicate cu.)	ds. or tons, and per o	day, month (	or year) _		IID ac	pearc		
Mineral Estate Owner:	Name: Onivir	a Minin	g Com	oanv			····	
Milleral Estate Owner.	Address: Box 21				020			
	Telephone: (505)							
Surface Estate Owner:	Name:							
Juliace Estate Owner.	Address:							
	Telephone:( )—	(same)			<del></del>			
Mineral Estate Classific  State Indian	ation: (Please check) Federal Private							
I hereby swear or affirm	n that the information							
herein provided is true,	complete and correct,	•					, <del>**</del> *	
and that all information released.	on this form may be			Title: _	Genera	l Manag	er	
lette &	H D							•
	Estan			Address	s:(as	above)		
Signature								
Arthur E. Gel Name (please print)	)eau			Date: _	Februa	ry 10.	1993	



## MINE/MILL/SMELTER REGISTRATION

Name of Mine/MixX	Smokker Section 33 N	1i ne
Name of Operator:	Quivira Mining Company	Telephone: 287-8851
Address: P.O. Bo	x 218, Grants, New Mexic	co 87020
Name of Previous O	perator (if applicable):	
Location: County	McKinley 1/4	1-1/4 NE/NW Sec. 33 Township 14N Range 9W
	·	ke
_	2900541	191
Type of Operation:  MINE:  Mineral or Commodi	Surface Adit Shaft X In Sit	OCI 1989
Mineral Estate Owne	Address P.O. Box	Mining Company 218, Grants, NM 87020 287-8851
Surface Estate Owne	Address P.O. Box	Mining Company 218, Grants, NM 87020 287-8851
Mineral Estate Class	ification: (Please check)	
State	Federal Indian	Private X
I hereby swear or herein provided is to	affirm that the information that the information of the correct.	DO NOT WRITE IN THIS SPACE
Signature		Registration Number Assigned
Title: General Address: P.O. Bo Grants		Signature  Title: Date:
Date:10-10-8	89	

Section 35 Mine Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake



April 28, 2003

Date:

## STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505

Telephone: (505) 476-3400 FAX No.: (505) 476-3402

FORM 12: NOTICE OF INTENT TO SUSPEND OPERATIONS	For MMD use only
100012.12 012.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	r
Name of Company: Rio Algom Mining LLC	
Address: PO Box 218, Grants, NM USA 87020	
Name of Operation: Section 35 Mine	MSHA Number: 2900776
Location: County McKinley 1/4-1/4 Sec. Section	35 Township T14N Range R9W
Directions to Location if Unsurveyed:	
Manager or Person in Charge and Title (please print): Terry Fletch	ner, General Manager
Address: same as above	Telephone: ( ) 505-287-8851
Start Up Date: 1971	
Photos and/or videos of the mine site may be filed with this form if desired type of OPERATION:  Surface Mine  Adit  (please check all that apply)  Shaft  Insitu  Mi	Mill Other Stope leaching ineral Mined or Milled uranium
Check One: XX Permanent Temporary  Temporary Suspension with responsible person(s) or	Suspension Date 12/31/2002 on site at all times
DESCRIPTION OF SAFEGUARDING PROCEDURES, MATERICOMPLETION OF SAFEGUARDING: (Note: Safeguarding guideline All surface shafts and ventilation holes a secured on openings. All electrical power sites is locked and fenced.  Reclamation of the site will proceed in act plan for the operation as described within the same of the same of the site will proceed in act plan for the operation as described within the same of t	tes are available upon request from MMD).  The safeguarded with metal barricades sources are disconnected. Access to ecordance with the approved closeout
Signature /	For MMD use only
Terry Fletcher	
Name (please print)	Approved Disapproved
Title: General Manager	By:
Address: PO Box 218	Signature Signature
Grants, NM 87020	Title:
Telephone: ( ) 505-287-8851	Date



#### STATE OF NEW MEXICO

Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive Santa Fe, NM 87505 Telephone: (505) 476-3400

Telephone: (505) 476-3400 FAX No.: (505) 476-3402

# FORM 11: ANNUAL REPORT OF URANIUM MINING OPERATIONS

11 Section 35 Mine Quivira Mining Co.

A

An annual report is to be filed for each calendar year period from January 1 through December 31. Reports are to be received by the Mining and Minerals Division before April 30 of the following year. Please submit a separate form for each operation. Data in this report covers calendar year 2002. Forms can also be found at www.emnrd.state.nm.us/mining/map/mapforms.htm.

Name of Company: Rio Algom Mining LLC	
Address: PO Box 218, Grants, NM USA 87020	
Mine Name: Section 35 Mine MSHA Numb	er: <u>2900776</u>
Location: County mCkinley 1/4-1/4 Sec. Section 35 Township T14N  Directions to Location if Unsurveyed:	Range R9W
Directions to Education in Orisul Veyed.	
Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Title (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Telephone: (please print): Telephone: (please print): Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Terry Fletcher, General Manager or Person in Charge and Telephone: (please print): Telephone: (please print): Telephone: (please print): Telephone: (please print): Telephone: (please print): Telephone: (please print): Telephone: (please print): Telephone: (please print): (please print): Telephone: (please print): (please print): (please print): (please print): (please print): (please pr	nager
1. Was there a change in mine name, owner or operating company during the reporting year?  X Yes No If yes, give date of change: 2 /12 / 02 (month / day / year)  Nature of Change: Changed to a limited liability corporation	
2. If a subsidiary of a larger company, provide the following information:  Name of Parent Company:  Algom Mining LLC  Address: 6305 Waterford Blvd., Ste. 325, Oklahoma City, OK 73118  Telephone:( )	
3. Type of Operation: Underground Conventional Insitu Leach  XX Underground Water Recovery Surface Mine  Other	
4. Mine Employment Information a. Average number of direct employees: Underground Surface Other b. Total number of days of operation: c. Total yearly payroll: d. Full time employees in reclamation (include in Total direct) e. Average number of contract employees, haulers, etc. (do not include in total direct):	Total direct
5. Description and Value of Improvements Made During Year	
a. Power Plant:	\$
b. New Structure(s):	\$
c. Existing Structure(s):	\$
d. Equipment:	\$
e. Other (specify):	\$
TOTAL:	\$0

6.	Per	cent Production by Mineral Estate Classi	ification:	·	
	Fed Stat	leral te	Private Indian (Reservation)	100%	
			Indian (Non-Reservation)		
7.	Pro	duction, Recovery and Value During year			
	a.	Annual Production:			
			<del></del>		
		700			
		5	······································		
	b.	End of Year Inventory:	· · · · · · · · · · · · · · · · · · ·		
		Ore on hand at beginning of reporting		<del></del>	
	_	Ore on hand at close of reporting year	ar (ST)		
	c. d.	Depth of production (ft.): Annual $U_3O_8$ recovery (Lbs.):	·-		
	u.	From ore			
		From mine water (stope leaching)	<del></del> -	0	
		From insitu leach			
	e. f.	Net recovery credited to this mine (Lbs. Unit value of recovered U <sub>3</sub> O <sub>8</sub> (\$/Lb.):	$J_3O_8$ ):		
	g.	Total sales value (\$/Lb.):			
	h.	Mine water production (de-watering) (GP	PD):	0	
	i.	Capacity:	-	0	
8.	C:-	e of Operation in Acres: 640	Α.	creage Disturbed to Date: 40	
0.	Siz	e of Operation in Acres		creage Reclaimed to Date: 30	
			•••		
9.	End	l of Year Summary: (Events, expansion/in	nprovement, closures, mark	ets, issues, suggested State action)	
					_
					_
					_
					_
10.	Vol	untary Information: Voluntary respons	ses to the following question	ns would be helpful to the Department.	
	a.	Sales to domestic utilities:	N/A		
	b.	Sales to foreign utilities		<del></del>	
					ِ است
I herel	y sw	ear or affirm that the information herein pr	ovided is true, complete and	d correct.	
		Tem 17 let	Date:	4/25/03	
Signat	ure	Jarry of Josepha	Date:	4-1103	
		(PLEASE COMPL	ETE ALL OF THE FOL	LOWING LEGIBLY)	14.5 1
	Te:	rry Flecther		,	
Name	(plea	ise print)			
	(1)	General Manager			
Title:_		PO Box 218			
Addre			<del></del>		
	ants				
> ne	•	E-mail: tfletcher@ramc.net	:	<del></del>	

Form 10 (4/03)

TOTHE TE (ALCO)

# SECTION 35

# **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

June 21, 199

Certified Mail
Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505

JUN 23, 1994

Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

I have also attached a June 9, 1993, letter from Mr. Art Gebeau Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. In January 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all responsibility for the reclamation and management of the Church Rock As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

I apologize for the delay in providing this information. As I stated to you in our telephone conversation, much of our resources have been committed to participating in the Mining and Mineral Division proposals to establish hard rock mine regulations in New Mexico. If I can be of further assistance or you need additional information, please contact me at (505) 287-8851, extension 200.

Sincerely

Terry Fletcher General Manager

Attachments: As stated

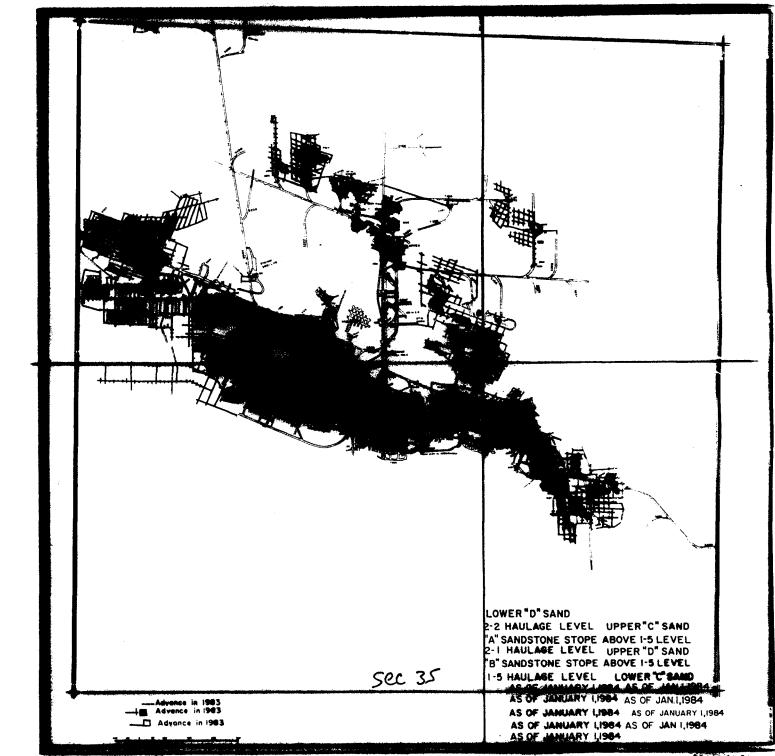
xc: B. Ferdinand (RAMC)

M. Freeman (RAMC)

P. Luthiger (Quivira)

R. Smith (Kerr Mc Gee)

file



Section 26

Advence in 1963

Advence in 1963 RE...

STOPE LEVEL AS OF JANUARY 1,1984
HAULAGE LEVEL AS OF JANUARY 1,1984

Sec 26





### STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department



Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505 Telephone: (505) 827-5970

FAX No.: (505) 827-7195

## MINE/MILL/SMELTER REGISTRATION

Name of Mine/Mill/Sme	lter: Section	35 Mine			
Name of Company: Ouivira Mining Company Telephone: (505) 287-8851				287-8851	
Address: Box 218	. Grants, NM	87020			
Manager or Person in C	harge and Title (plea	se print): <u>Arthu</u>	r E. Gebeau. General	Manager	
Name of Previous Comp					
Location: County McK	<u>inley</u> 1/4-1/4	SE/NW Sec.	35 Township 14N	Range 9W	
Directions to Location is	f Unsurveyed:				
USGS Quadrangle Map	Name:		1.071		
MSHA Number: 29	00541	Start	Up Date: 19/1		
	Surface	Adit _ Heap Lo	s operation:	u Leach	
Minerals or Commoditie	<del></del>				
Minerals or Commoditie	s Processed:				
Status: Acti	ve Intermit	tent <u>y</u> Inac	tive Under Developmen	1	
			1000TPD at peak		
			· · · · · · · · · · · · · · · · · · ·		
Mineral Estate Owner:					
		18, Grants, N			
		) 287-8851			
Surface Estate Owner:	Name:	same)		· · · · · · · · · · · · · · · · · · ·	
	Address:	same)		<del></del>	
	Telephone:()-	(same)			
Mineral Estate Classifica State Indian	_ Federal				
I hereby swear or affirm herein provided is true, and that all information	complete and correct	t <b>,</b>		, <del>,</del> .	
released.			Title: General Mana	ager	
Action & M	Show		Address:(as above	a)	
Signature					
Arthur E. Gebeau Name (please print)			Date: February 10, 1993		



Mining and Minerals Division 525 Camino de los Marquez Santa Fe, NM 87503

DO NOT WRITE IN THIS SPACE

8B -

Name of Operator: Quivira Mining Company Address: P.O. Box 218, Grants, New Mexico 87020	
Mine Name: Section 35 Mine	MSHA Number: 2900541
Location: County McKinley 1/4-1/4 NW/SE Sec.  Directions to Location if Unsurveyed:	35 Township 14N Range 9W
Type of Operation (please check):  Surface Mine Adit Other ShaftX Insitu Mineral M	Mined
Check One: Permanent Temporary X	

#### DESCRIPTION OF MATERIALS AND SAFEGUARDING PROCEDURES:

- 1. The shaft is protected with closed steel doors over the opening and a locked gate to prevent entry.
- 2. Ventilation holes are either capped with 1/2" steel plate or contain ventilation equipment that prohibits entry to the opening.
- 3. Mine buildings are locked.
- 4. Main road to the facility contains a locked gate.

Signed by:	
Title:	General Manager
Address:	P.O. Box 218
	Grants, New Mexico 87020
Telephone: 287-8851, ext. 201	
• —	

	DO NOT	VRITE I	N THIS S	PACE	
Appro	ved	_			
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Date:	9-30	-9/			
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# **Quivira Mining Company**

September 24, 1991

Ms. Rhea L. Graham, Director Mining and Minerals Division Energy, Mineral and Natural Resources Department 2040 South Pacheco Santa Fe, New Mexico 87505

Dear Ms. Graham:

Please find attached a "Notice of Intention To Suspend Operations" for Quivira Mining Company's (QMC) Section 35 Mine. QMC plans to keep this facility on standby status until there is improvement in the uranium market. Substantial uranium resource remains in this property.

Please contact me at 287-8851, Ext. 201 if you have any questions concerning this matter.

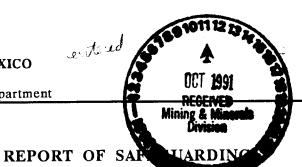
Sincerely,

H.E. Whitacre General Manager



### STATE OF NEW MEXICO Energy, Minerals and Natural Resources Department

NOTE: Safeguarding guidelines are available upon request from MMD.



Mining and Minerals Division 2040 South Pacheco Street Santa Fe, NM 87505 Telephone: (505) 827-5923

Telephone: (505) 827-5923 FAX No.: (505) 827-7195

DO NOT WRITE IN THIS SPACE

	Ouivire Mining Company
	e of Company: Quivira Mining Company
	ess: P.O. Box 218, Grants, New Mexico 87020
	or Mill Name: Section 35 Mine MSHA Number 2900541
Locat	• • • • • • • • • • • • • • • • • • • •
Direc	tions to Location if Unsurveyed:
Туре	of Operation (please check):  Mineral Mined or Milled Surface Mine Adit Mill Shaft X Insitu Other
	CRIPTION OF MATERIALS AND PROCEDURES USED IN COMPLETED SAFEGUARDING: (include tities of materials)
1.	The shaft is protected from entry by closed steel doors constructed of 1/4" steel plate reinforced with 3"x3" angle iron located at the subcollar approximately 5' below the surface pad. In addition, the shaft collar is protected from entry by a 6' expanded metal fence and locked gate.
2.	Ventilation holes are either capped with $1/2$ " steel plate or contain ventilation equipment which prohibits entry to the opening.
3.	Mine buildings are locked
4.	Main road to the facility contains a locked gate
I her	
-	E. Whitacre e (please print)
Title:	
Addr	ress: P.O. Box 218 Grants, New Mexico 87020
Date	<u>10-10-91</u>

# Quivira Mining Company

October 10, 1991

Ms. Rhea L. Graham, Director Energy, Minerals and Natural Resources Department Mining and Minerals Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

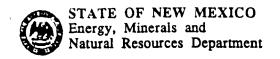
Dear Ms. Graham:

Please find attached a "Report of Safeguarding" for Quivira Mining Company's Section 35 Mine. Operations at this facility were temporarily suspended on September 19, 1991, because of the soft uranium market. Substantial uranium resource remains in this property.

Please contact me at 287-8851, Ext. 201 if you have any questions concerning this matter.

Sincerely,

H.E. Whitacre General Manager



## MINE/MILL/SMELTER REGISTRATION

Name of Mine/WAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Name of Operator: Quivira Mining Company	Telephone: 287-8851
Address: P.O. Box 218, Grants, New Mexico	
Name of Previous Operator (if applicable):	
Location: County McKinley 1/4-1/4	4 NW/SE Sec. 35 Township 14N Range 9W
Directions to Location if Unsurveyed:	
USGS Quadrangle Map Name: Ambrosia Lake	
MSHA Number: 2900541	3 9
Type of Operation: (please check)	063 17550
MINE: Surface Adit In Situ L	each Other (describe)
Mill Smelter _	Heap Ceach
Mineral or Commodity Produced: Uranium	131113
Address P.O. Box 21	ing Company 8. Grants, NM 87020 8851
Surface Estate Owner: Name Quivira Min Address P.O. Box 21 Telephone 287-	8, Grants, NM 87020
Mineral Estate Classification: (Please check)	
State Federal Indian	Private X
I hereby swear or affirm that the information herein provided is true, complete and correct.	DO NOT WRITE IN THIS SPACE
Signature Signature	Registration Number Assigned
Title: General Manager Address: P.O. Box 218 Grants, NM 87020	By: Signature Title: Date:
Date: 10-10-89	

Section 36 Mine (Ike, Elizabeth) Rio Algom (Quivira Mining, Kerr-McGee, Kermac) USGS Quad: Ambrosia Lake

and a

# SECTION 36

# **QUIVIRA MINING COMPANY**

POST OFFICE BOX 218 - GRANTS, NEW MEXICO 87020

June 21, 199

Certified Mail Return Receipt Requested P 762 964 387

Ms. Kay Hatton, Mine Program Manager Department of Energy, Minerals and Natural Resources 2040 South Pacheco Street Santa Fe, NM 87505



Dear Ms. Hatton:

Please find enclosed 8 1/2 X 11 maps depicting the final survey of the underground workings for Quivira Mining Company's mines (Sections 22, 24, 30W, 30, 19, 17, 33, 35 and 36). These maps indicate the present extent of the underground workings.

I have also attached a June 9, 1993, letter from Mr. Art Gebeau Energy, Minerals and Natural Resources clarifying our position regarding Church Rock I and Church Rock IE as these mines are not owned be Quivira Mining, but rather by Kerr McGee Corporation. Prior to January 1989, Quivira (and its properties at Ambrosia Lake) was a wholly owned subsidiary of Kerr McGee Corporation. 1989, Quivira and its Ambrosia Lake properties were purchased from Kerr McGee by Rio Algom Mining Corp. The Church Rock mine I and IE properties were not included in the sale and remained with Kerr January 1989 to July 1992 Quivira did reclamation work on McGee. the Church Rock mines as a contractor on behalf of Kerr McGee, its Commencing in July 1992, Kerr McGee resumed all owner. responsibility for the reclamation and management of the Church Rock As such, Mr. Roy Smith of Kerr McGee, has been notified of your request to provide final closure maps for the Church Rock mines.

I apologize for the delay in providing this information. As I stated to you in our telephone conversation, much of our resources have been committed to participating in the Mining and Mineral Division proposals to establish hard rock mine regulations in New Mexico. If I can be of further assistance or you need additional information, please contact me at (505) 287-8851, extension 200.

Lerry of Filther

Terry Fletcher General Manager

Attachments: As stated

xc: B. Ferdinand (RAMC)

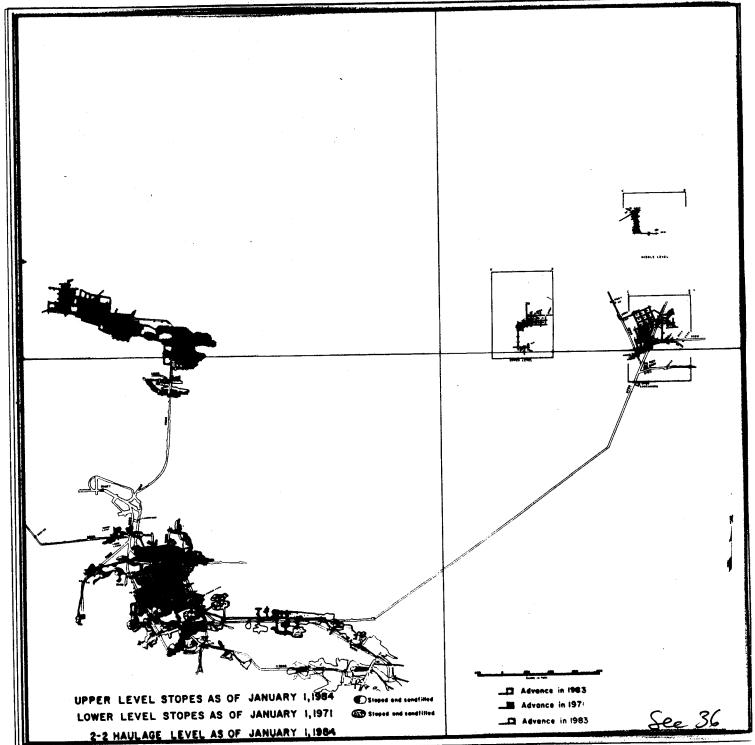
M. Freeman (RAMC)

P. Luthiger (Quivira)

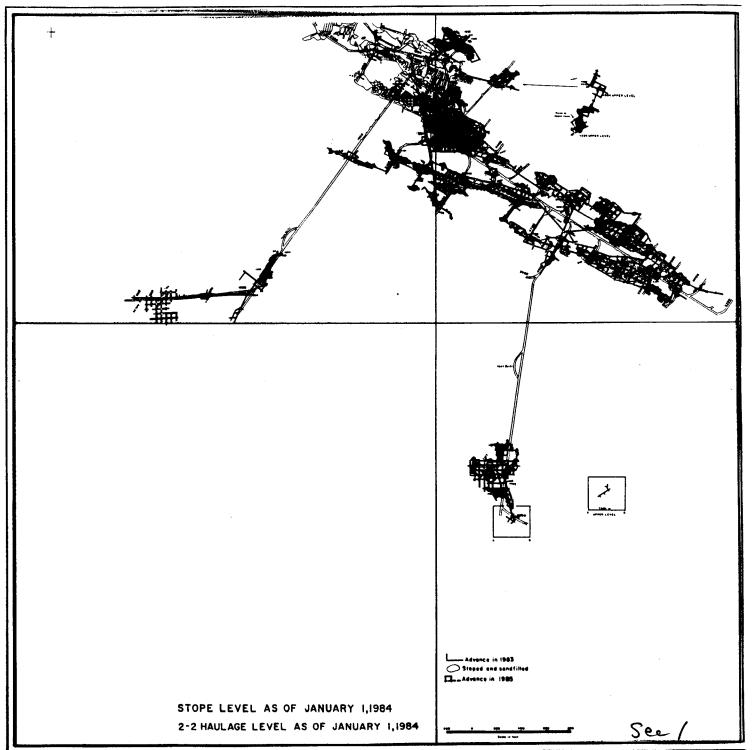
R. Smith (Kerr Mc Gee)

file

Section 36



Section 1

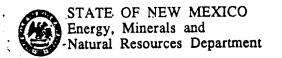


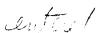
# State of New Mexico ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

MINING AND MINERALS DIVISION

### CONFIRMATION/REPORT OF TELEPHONE CONVERSATION

	CONTINUATION RELIGION OF		
TO	Name Hal Whitacre	FR	Name Kay Hatton
	Office Ounvira mag Co.	M	Office MRGS
	Location Guants in		Location 2040 S. Pacheco, Santa Fe
	Telephone Number (505) 287-8351		Telephone Number (505) 827 - 5970
Pu	rpose of Call:		1
S	afeguarding Update - Sect	11	n 36 mme
		į.	Alm m 1/19/91. all was in fide
~-,·^	his mind was singueded by K. S	160	Nm m //11/41.000 0000
11	Seeding of the districted areas it	1	A place in 1991,"
	,		
			-
L XO	planatory Remarks:		





# NOTICE OF INTENTION TO SUSPEND OPERATIONS

	DO NOT WRITE IN THIS SPACE	
	6BL 101	
Į	ungereted 7/19/4	4
	caldate - My	î

No. 100 Octobro Mining Commons	- Caldat - "
Name of Operator: Quivira Mining Company Address: P.O. Box 218, Grants, NM 87020	<u>y</u> 0
Mine Name: Section 36 Mine	MSHA Number: 2900541
Location: County McKinley 1/4-1 Directions to Location if Unsurveyed:	1/4 SW/NE Sec. 36 Township 14N Range 9W
Type of Operation (please check):  Surface Mine Adit Shaft X Insitu	<del></del>
Check One: Permanent X Tempo	rary
DESCRIPTION OF MATERIALS AND SAFEG	UARDING PROCEDURES:
1. All mining equipment and supplies have	e been removed from the property.
2. All buildings have been removed from	the property.
<ol> <li>The shaft and ventilation holes were posterior of re-inforced concrete and covered with the cov</li></ol>	-
4. A capped 14" pipe was intalled in the for future leaching operations.	shaft and ventilation hole #1
5. Seeding of the disturbed areas is plant	ned for May and June, 1991.
	MAY 1991 RECEIVED RECEIVED Mining & Mining Wisson  A SA SA MELLIV
Signed by: Seneral Manager  General Manager	DO NOT WRITE IN THIS SPACE Approved
Address: P.O. Box 218	By:Signature
Grants, NM 87020 Telephone: (505) 287-8851	Title: Date:

# Quivira Mining Company

May 22, 1991

State of New Mexico
Energy, Minerals and Natural Resources Department
Mining and Minerals Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
Attn: Ms. Carol Leach
Acting Director

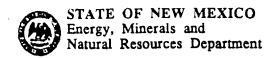
Dear Ms. Leach:

Please find attached "Notice of Intention To Suspend Operations" for Quivira Mining Company's Section 36, Church Rock I and Church Rock IE Mines. As we discussed in our telephone conversation this morning, reclamation of the Section 36 Mine site has essentially been completed and is on going at the Church Rock properties.

Please contact me at 287-8851, Ext. 201, if you have any questions concerning this matter. I would also like to invite you and members of your staff to visit our Ambrosia Lake operation. We are presently reclaiming the largest uranium mill tailings pile in the United States.

Sincerely,

General Manager



## MINE/MILL/SMELTER REGISTRATION

Name of Mine/MilixSmeker Section 36 Min	e
Name of Operator: Quivira Mining Company	Telephone: 287-8851
Address: P.O. Box 218, Grants, New Mexico	87020
Name of Previous Operator (if applicable):	
Location: County McKinley 1/4-1/	4 SW/NE Sec. 36 Township 14N Range 9W
Directions to Location if Unsurveyed:	
USGS Quadrangle Map Name: Ambrosia Lake	
MSHA Number: 2900541	
Type of Operation: (please check)  MINE: Surface Adit	eachOther discribe
Mineral or Commodity Produced: Uranium	
Address P.O. Box 114	Mexico Commissioner of Public Lands 8, Santa Fe, NM 87504-1148 7-5760
Surface Estate Owner: Name State of New Address P.O. Box 114 Telephone 827	Mexico Commissioner of Public Lands 8, Santa Fe, NM 87504-1148 7-5760
Mineral Estate Classification: (Please check)	
State X Federal Indian	Private
I hereby swear or affirm that the information herein provided is true, complete and correct.	DO NOT WRITE IN THIS SPACE
Signature Signature	Registration Number Assigned
Title: General Manager Address: P.O. Box 218 Grants, NM 87020	By:Signature  Title: Date:
Date: 10-10-89	